

GenCore version 5.1.6
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QM protein - protein search, using sw model

Run on: March 30, 2004, 15:07:28 ; Search time 0.513208 Seconds
(without alignments)
1609.516 Million cell updates/sec

Title: US-09-893-371A-2

Perfect score: 78

Sequence: 1 MYRASALGSDGVRV 16

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA:*
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5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	52	65.7	303	4	US-09-328-352-8211
2	50	64.1	301	4	US-09-540-236-2420
3	49	62.8	219	4	US-09-438-144-3
4	49	62.8	220	4	US-09-438-144-2
5	49	62.8	262	1	US-08-241-766-8
6	49	62.8	262	1	US-08-241-766-9
7	49	62.8	270	4	US-09-489-039A-7939
8	48	61.5	275	4	US-09-543-681A-4697
9	45	57.7	1059	4	US-09-489-039A-10044
10	44	56.4	226	4	US-09-438-144-1
11	44	56.4	268	4	US-09-438-144-7
12	44	56.4	272	4	US-09-252-991A-30277
13	41	52.6	330	4	US-09-252-991A-25521
14	40	51.3	492	4	US-09-489-039A-9018
15	39	50.0	224	4	US-09-424-978B-2
16	38	48.7	223	4	US-09-543-681A-6559
17	38	48.7	308	3	US-09-347-803-12
18	38	48.7	411	4	US-09-252-991A-21815
19	38	48.7	985	5	PCT-US96-03916-6
20	38	48.7	985	5	PCT-US96-03916-66
21	37	47.4	270	4	US-09-252-991A-24974
22	37	47.4	298	4	US-09-252-991A-22627
23	37	47.4	309	4	US-09-134-001C-3039
24	37	47.4	364	4	US-09-252-991A-27209
25	37	47.4	623	3	US-09-041-991A-6
26	37	47.4	623	4	US-09-608-533A-6
27	37	47.4	625	4	US-09-661-322A-48

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28      37      47.4      687      4      US-09-252-991A-26187      Sequence 26187, A
29      37      47.4      943      4      US-09-397-885-5      Sequence 5, Appli
30      37      47.4      943      4      US-09-397-885-5      Sequence 5, Appli
31      36      46.2      96      4      US-09-673-395A-418      Sequence 418, App
32      36      46.2      219      4      US-09-673-395A-463      Sequence 463, App
33      36      46.2      251      4      US-09-438-144-4      Sequence 4, Appli
34      36      46.2      251      4      US-09-438-144-6      Sequence 6, Appli
35      36      46.2      259      4      US-09-498-520A-52      Sequence 52, Appli
36      36      46.2      260      4      US-09-134-001C-4009      Sequence 4009, Ap
37      36      46.2      265      4      US-09-489-039A-7601      Sequence 7601, Ap
38      36      46.2      301      4      US-08-311-731A-156      Sequence 156, App
39      36      46.2      537      1      US-08-173-508-2      Sequence 2, Appli
40      36      46.2      537      2      US-08-265-310-2      Sequence 2, Appli
41      36      46.2      537      3      US-08-951-742-2      Sequence 2, Appli
42      36      46.2      632      4      US-09-661-322A-2      Sequence 2, Appli
43      36      46.2      635      3      US-09-041-991A-4      Sequence 4, Appli
44      36      46.2      635      4      US-09-608-533A-4      Sequence 4, Appli
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ALIGNMENTS

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RESULT 1
US-09-328-352-8211
; Sequence 8211, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 8211
; LENGTH: 303
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-8211

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Query Match 66.7%; Score 52; DB 4; Length 303;
Best Local Similarity 66.7%; Pred. No. 0.28;
Matches 10; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

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Qy      1      MRYRASALGSDGVRV 15
Db      209      VRYLASSLGVDGIRV 223

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RESULT 2
US-09-540-236-2420
; Sequence 2420, Application US/09540236
; Patent No. 6673910
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO MORAXELLA CAT
; FILE REFERENCE: FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.2005-001
; CURRENT APPLICATION NUMBER: US/09/540,236
; CURRENT FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 3840
; SEQ ID NO 2420
; LENGTH: 301
; TYPE: PRT
; ORGANISM: M.cattarrhalis
US-09-540-236-2420

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Best Local Similarity 60.0%; Pred. No. 0.61;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

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Qy      1      MRYRASALGSDGVRV 15

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RESULT 11

US-09-438-144-7
 ; Sequence 7, Application US/09438144
 ; Patent No. 6531291
 ; GENERAL INFORMATION:
 ; APPLICANT: Kabbash, Christina
 ; APPLICANT: Silverstein, Samuel C.
 ; APPLICANT: Shuman, Howard A.
 ; APPLICANT: Blanchard, Josh S.
 ; TITLE OF INVENTION: NOVEL ANTIMICROBIAL ACTIVITY OF GEMFIBROZIL AND RELATED COMPOUNDS
 ; FILE REFERENCE: 0575/58043
 ; CURRENT APPLICATION NUMBER: US/09/438,144
 ; CURRENT FILING DATE: 1999-11-10
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 7
 ; LENGTH: 268
 ; TYPE: PRT
 ; ORGANISM: L. pneumophila enoyl reductase
 US-09-438-144-7

Query Match 56.4%; Score 44; DB 4; Length 268;
 Best Local Similarity 53.3%; Pred. No. 5.8;
 Matches 8; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 1 MYRASALGSDGVRV 15
 Db 177 VRYLAASLGRGLRI 191

RESULT 12

US-09-252-991A-30277
 ; Sequence 30277, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18
 ; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 30277
 ; LENGTH: 272
 ; TYPE: PRT
 ; ORGANISM: Pseudomonas aeruginosa
 US-09-252-991A-30277

Query Match 56.4%; Score 44; DB 4; Length 272;
 Best Local Similarity 53.3%; Pred. No. 5.9;
 Matches 8; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 1 MYRASALGSDGVRV 15
 Db 180 VRYLAGSLGAEGTRV 194

RESULT 13

US-09-252-991A-25521
 ; Sequence 25521, Application US/09252991A
 ; Patent No. 6551795
 ; GENERAL INFORMATION:
 ; APPLICANT: Marc J. Rubenfield et al.
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
 ; FILE REFERENCE: 107196.136
 ; CURRENT APPLICATION NUMBER: US/09/252,991A
 ; CURRENT FILING DATE: 1999-02-18

; PRIOR APPLICATION NUMBER: US 60/074,788
 ; PRIOR FILING DATE: 1998-02-18
 ; PRIOR APPLICATION NUMBER: US 60/094,190
 ; PRIOR FILING DATE: 1998-07-27
 ; NUMBER OF SEQ ID NOS: 33142
 ; SEQ ID NO 25521
 ; LENGTH: 330
 ; TYPE: PRT
 ; ORGANISM: Pseudomonas aeruginosa
 US-09-252-991A-25521

Query Match 52.6%; Score 41; DB 4; Length 330;
 Best Local Similarity 58.3%; Pred. No. 24;
 Matches 7; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 2 RYRASALGSDGV 13
 Db 316 KYRANAAGDGV 327

RESULT 14

US-09-489-039A-9018
 ; Sequence 9018, Application US/09489039A
 ; Patent No. 6610836
 ; GENERAL INFORMATION:
 ; APPLICANT: Gary Breton et. al
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
 ; FILE REFERENCE: 2709.2004001
 ; CURRENT APPLICATION NUMBER: US/09/489,039A
 ; CURRENT FILING DATE: 2000-01-27
 ; PRIOR APPLICATION NUMBER: US 60/117,747
 ; PRIOR FILING DATE: 1999-01-29
 ; NUMBER OF SEQ ID NOS: 14342
 ; SEQ ID NO 9018
 ; LENGTH: 492
 ; TYPE: PRT
 ; ORGANISM: Klebsiella pneumoniae
 US-09-489-039A-9018

Query Match 51.3%; Score 40; DB 4; Length 492;
 Best Local Similarity 53.8%; Pred. No. 55;
 Matches 7; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1 MYRASALGSDGV 13
 Db 365 MRYPVTMGSDGL 377

RESULT 15

US-09-424-978B-2
 ; Sequence 2, Application US/09424978B
 ; Patent No. 6684445
 ; GENERAL INFORMATION:
 ; APPLICANT: Falco, Saverio Carl
 ; APPLICANT: Allen, Stephen M.
 ; APPLICANT: Rafalski, J. Antoni
 ; APPLICANT: Hitz, William D.
 ; APPLICANT: Kinney, Anthony J.
 ; APPLICANT: Abell, Lynne N.
 ; APPLICANT: Thorpe, Catherine J.
 ; TITLE OF INVENTION: Plant Amino Acid Biosynthetic Enzymes
 ; FILE REFERENCE: BB-1087
 ; CURRENT APPLICATION NUMBER: US/09/424,978B
 ; CURRENT FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: US 60/048,771
 ; PRIOR FILING DATE: 1997-06-06
 ; NUMBER OF SEQ ID NOS: 43
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 2
 ; LENGTH: 224
 ; TYPE: PRT
 ; ORGANISM: Zea mays

US-09-424-978B-2

Query Match 50.0%; Score 39; DB 4; Length 224;
Best Local Similarity 66.7%; Pred. No. 35;
Matches 8; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 4 RASALGSDGVRV 15
| | | | |
Db 153 RGOLLGEDGVRV 164

Search completed: March 30, 2004, 15:13:37
Job time : 1.51321 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: March 30, 2004, 15:11:54 ; Search time 1.19245 Seconds
(without alignments)
3510.905 Million cell updates/sec

Title: US-09-893-371A-2

Perfect score: 78

Sequence: 1 MRYRASALGSDGVRVT 16

Scoring table: BLOSUM62

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Searched: 1065169 seqs, 261661801 residues

Total number of hits satisfying chosen parameters: 1065169

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	78	100.0	14	US-10-287-216-1	Sequence 1, Appli
3	56	71.8	20	US-10-287-216-4	Sequence 4, Appli
4	52	66.7	288	US-10-282-122A-45237	Sequence 45237, A
5	51	65.4	262	US-10-369-493-388	Sequence 388, App
6	51	65.4	262	US-10-369-493-21191	Sequence 21191, A
7	50	64.1	260	US-10-282-122A-66916	Sequence 66916, A
8	50	64.1	274	US-10-282-122A-62934	Sequence 62934, A
9	49	62.8	219	US-10-366-686-2	Sequence 62934, A
10	49	62.8	219	US-10-366-686-3	Sequence 2, Appli
11	49	62.8	262	US-09-815-242-10152	Sequence 3, Appli
12	49	62.8	262	US-10-282-122A-42969	Sequence 10152, A
13	49	62.8	262	US-10-282-122A-55624	Sequence 42969, A
14	49	62.8	262	US-10-282-122A-53996	Sequence 55624, A
15	49	62.8	262	US-10-282-122A-74993	Sequence 53996, A
					Sequence 74993, A

16	49	62.8	262	12	US-10-282-122A-76000	Sequence 76000, A
17	49	62.8	262	15	US-10-369-493-812	Sequence 812, App
18	49	62.8	262	16	US-10-377-250-3	Sequence 3, Appli
19	49	62.8	269	9	US-09-815-242-13824	Sequence 13824, A
20	48	61.5	262	12	US-10-282-122A-68608	Sequence 68608, A
21	46	59.0	264	15	US-10-369-493-13790	Sequence 13790, A
22	45	57.7	256	15	US-10-369-493-19566	Sequence 19566, A
23	45	57.7	784	12	US-10-282-122A-55466	Sequence 55466, A
24	45	57.7	1050	12	US-10-282-122A-60043	Sequence 60043, A
25	44	56.4	190	12	US-10-424-599-202305	Sequence 202305, A
26	44	56.4	227	14	US-10-366-686-1	Sequence 1, Appli
27	44	56.4	264	15	US-10-369-493-18839	Sequence 18839, A
28	44	56.4	265	9	US-09-815-242-11851	Sequence 11851, A
29	44	56.4	265	12	US-10-282-122A-66330	Sequence 66330, A
30	44	56.4	268	12	US-10-282-122A-61559	Sequence 61559, A
31	44	56.4	268	14	US-10-366-686-7	Sequence 7, Appli
32	43	55.1	252	15	US-10-369-493-4271	Sequence 4271, Ap
33	43	55.1	259	15	US-10-369-493-21833	Sequence 21833, A
34	43	55.1	263	12	US-10-282-122A-49065	Sequence 49065, A
35	43	55.1	263	12	US-10-282-122A-50662	Sequence 50662, A
36	43	55.1	323	12	US-10-425-114-64219	Sequence 64219, A
37	42	53.8	264	12	US-10-282-122A-69729	Sequence 69729, A
38	42	53.8	264	15	US-10-369-493-7881	Sequence 7881, Ap
39	41	52.6	256	15	US-10-369-493-8921	Sequence 8921, Ap
40	41	52.6	256	15	US-10-369-493-10656	Sequence 10656, A
41	41	52.6	261	12	US-10-282-122A-51117	Sequence 51117, A
42	41	52.6	451	14	US-10-128-714-3277	Sequence 3277, Ap
43	41	52.6	512	14	US-10-156-761-9793	Sequence 9793, Ap
44	41	52.6	559	14	US-10-128-714-8277	Sequence 8277, Ap
45	40	51.3	231	12	US-10-282-122A-47731	Sequence 47731, A

ALIGNMENTS

RESULT 1
US-10-287-216-2
; Sequence 2, Application US/10287216
; Publication No. US20030186375A1
; GENERAL INFORMATION:
; APPLICANT: de Lanerolle, Primal
; APPLICANT: No. US20030186375A1ak, Grzegorz
; APPLICANT: Pestic-Dragovich, Lidija
; APPLICANT: Stojiljkovic, Ljuba
; APPLICANT: Hozak, Pavel
; TITLE OF INVENTION: Nuclear Myosin I B with A 16 Amino Acid N-Terminal
; TITLE OF INVENTION: Extension
; FILE REFERENCE: 30151/92399
; CURRENT APPLICATION NUMBER: US/10/287,216
; CURRENT FILING DATE: 2002-11-04
; PRIOR APPLICATION NUMBER: US/09/893,371
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: 60/214,944
; PRIOR FILING DATE: 2000-06-29
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 16
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:N-terminal 16
; OTHER INFORMATION: amino acid extension
US-10-287-216-2

Query Match 100.0%; Score 78; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 5e-07;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MRYRASALGSDGVRVT 16
Db 1 MRYRASALGSDGVRVT 16

RESULT 2
US-10-287-216-1
; Sequence 1, Application US/10287216
; Publication No. US20030186375A1
; GENERAL INFORMATION:
; APPLICANT: de Lanerolle, Primal
; APPLICANT: No. US20030186375A1ak, Grzegorz
; APPLICANT: Pestic-Dragovich, Lidiya
; APPLICANT: Stojiljkovic, Ljuba
; APPLICANT: Hozak, Pavel
; TITLE OF INVENTION: Nuclear Myosin I B with A 16 Amino Acid N-Terminal
; TITLE OF INVENTION: Extension
; FILE REFERENCE: 30151/92399
; CURRENT APPLICATION NUMBER: US/10/287,216
; CURRENT FILING DATE: 2002-11-04
; PRIOR APPLICATION NUMBER: US/09/893,371
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: 60/214,944
; PRIOR FILING DATE: 2000-06-29
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 1044
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Nuclear Myosin
US-10-287-216-1

Query Match 100.0%; Score 78; DB 14; Length 1044;
Best Local Similarity 100.0%; Pred. No. 5.2e-05;
Matches 16; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MRYASALGSDGVRVT 16
DB 1 MRYASALGSDGVRVT 16

RESULT 3
US-10-287-216-4
; Sequence 4, Application US/10287216
; Publication No. US20030186375A1
; GENERAL INFORMATION:
; APPLICANT: de Lanerolle, Primal
; APPLICANT: No. US20030186375A1ak, Grzegorz
; APPLICANT: Pestic-Dragovich, Lidiya
; APPLICANT: Stojiljkovic, Ljuba
; APPLICANT: Hozak, Pavel
; TITLE OF INVENTION: Nuclear Myosin I B with A 16 Amino Acid N-Terminal
; TITLE OF INVENTION: Extension
; FILE REFERENCE: 30151/92399
; CURRENT APPLICATION NUMBER: US/10/287,216
; CURRENT FILING DATE: 2002-11-04
; PRIOR APPLICATION NUMBER: US/09/893,371
; PRIOR FILING DATE: 2001-06-27
; PRIOR APPLICATION NUMBER: 60/214,944
; PRIOR FILING DATE: 2000-06-29
; NUMBER OF SEQ ID NOS: 6
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 20
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:NMI Beta
; OTHER INFORMATION: Peptide Overlapping Consensus Start Site
US-10-287-216-4

Query Match 71.8%; Score 56; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.0053;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 5 ASALGSDGVRVT 16
DB 1 ASALGSDGVRVT 12

RESULT 4
US-10-282-122A-45237
; Sequence 45237, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Chlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 45237
; LENGTH: 288
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-10-282-122A-45237

Query Match 66.7%; Score 52; DB 12; Length 288;
Best Local Similarity 66.7%; Pred. No. 0.53;
Matches 10; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

QY 1 MRYEASALGSDGVRV 15
DB 194 VRYLASSLGVDGIRV 208

RESULT 5
US-10-369-493-388
; Sequence 388, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.

```

; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 388
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Xenorhabdus nematophilus
; NAME/KEY: unsure
; LOCATION: (1)..(262)
; OTHER INFORMATION: unsure at all Xaa locations
US-10-369-493-388

```

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Query Match 65.4%; Score 51; DB 15; Length 262;
Best Local Similarity 60.0%; Pred. No. 0.71;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

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```

Qy 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGAEGVRV 184

```

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RESULT 6
US-10-369-493-21191
; Sequence 21191, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 21191
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Xenorhabdus nematophilus
US-10-369-493-21191

```

```

Query Match 65.4%; Score 51; DB 15; Length 262;
Best Local Similarity 60.0%; Pred. No. 0.71;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

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```

Qy 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGAEGVRV 184

```

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RESULT 7
US-10-282-122A-66916
; Sequence 66916, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyskind, Judith

```

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; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 66916
; LENGTH: 260
; TYPE: PRT
; ORGANISM: Pasteurella multocida
US-10-282-122A-66916

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Query Match 64.1%; Score 50; DB 12; Length 260;
Best Local Similarity 64.3%; Pred. No. 1.1;
Matches 9; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

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Qy 2 RYRASALGSDGVRV 15
Db 171 RFWAALGKDGIRV 184

```

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RESULT 8
US-10-282-122A-62934
; Sequence 62934, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Karl
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23

```



```
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 62934
; LENGTH: 274
; TYPE: PRT
; ORGANISM: Moraxella catarrhalis
US-10-282-122A-62934

Query Match      64.1%; Score 50; DB 12; Length 274;
Best Local Similarity 60.0%; Pred. No. 1.1;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 MRYRASALGSDGVRV 15
Db 175 VRYLASSLGEGIRV 189

RESULT 9
US-10-366-686-2
; Sequence 2, Application US/10366686
; Publication No. US20030191146A1
; GENERAL INFORMATION:
; APPLICANT: Kabbash, Christina
; APPLICANT: Silverstein, Samuel
; APPLICANT: Shuman, Howard A
; APPLICANT: Blanchard, John S
; TITLE OF INVENTION: NOVEL ANTIMICROBIAL ACTIVITY OF GEMFIBROZIL AND RELATED COMPOUNDS
; FILE REFERENCE: 0575/58043
; CURRENT APPLICATION NUMBER: US/10/366,686
; CURRENT FILING DATE: 2003-02-13
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 2
; LENGTH: 219
; TYPE: PRT
; ORGANISM: E. coli
US-10-366-686-2

Query Match      62.8%; Score 49; DB 14; Length 219;
Best Local Similarity 60.0%; Pred. No. 1.3;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGPEGVRV 184

RESULT 10
US-10-366-686-3
; Sequence 3, Application US/10366686
; Publication No. US20030191146A1
; GENERAL INFORMATION:
; APPLICANT: Kabbash, Christina
; APPLICANT: Silverstein, Samuel
; APPLICANT: Shuman, Howard A
```

```
; APPLICANT: Blanchard, John S
; TITLE OF INVENTION: NOVEL ANTIMICROBIAL ACTIVITY OF GEMFIBROZIL AND RELATED COMPOUNDS
; FILE REFERENCE: 0575/58043
; CURRENT APPLICATION NUMBER: US/10/366,686
; CURRENT FILING DATE: 2003-02-13
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 3
; LENGTH: 219
; TYPE: PRT
; ORGANISM: S. typhimurium
US-10-366-686-3

Query Match      62.8%; Score 49; DB 14; Length 219;
Best Local Similarity 60.0%; Pred. No. 1.3;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGPEGVRV 184

RESULT 11
US-09-815-242-10152
; Sequence 10152, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haseibeck, Robert
; APPLICANT: Ohlsen, Kari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.
; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10152
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Escherichia coli
US-09-815-242-10152

Query Match      62.8%; Score 49; DB 9; Length 262;
Best Local Similarity 60.0%; Pred. No. 1.6;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGPEGVRV 184

RESULT 12
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US-10-282-122A-42969
; Sequence 42969, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 42969
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Escherichia coli
US-10-282-122A-42969

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```

Query Match 62.8%; Score 49; DB 12; Length 262;
Best Local Similarity 60.0%; Pred. No. 1.6;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

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```

Qy 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGPGVRV 184

```

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RESULT 13
US-10-282-122A-55624
; Sequence 55624, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert

```

```

; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 55624
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Enterobacter cloacae
US-10-282-122A-55624

```

```

Query Match 62.8%; Score 49; DB 12; Length 262;
Best Local Similarity 60.0%; Pred. No. 1.6;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

```

```

Qy 1 MRYRASALGSDGVRV 15
Db 170 VRYMANAMGPGVRV 184

```

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RESULT 14
US-10-282-122A-59396
; Sequence 59396, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06

```

```
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 59396
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-10-282-122A-59396
```

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Query Match          62.8%; Score 49; DB 12; Length 262;
Best Local Similarity 60.0%; Pred. No. 1.6;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY      1 MRYRASALGSDGVRV 15
      :|||:|:|:|:|
Db      170 VRYMANMGPEGVRV 184
```

```
RESULT 15
US-10-282-122A-74993
; Sequence 74993, Application US/10282122A
; Publication No. US20040029129A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Liangsu
; APPLICANT: Zamudio, Carlos
; APPLICANT: Malone, Cheryl
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Kari
; APPLICANT: Zyskind, Judith
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John
; APPLICANT: Carr, Grant
; APPLICANT: Yamamoto, Robert
; APPLICANT: Forsyth, R.
; APPLICANT: Xu, H.
; TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
; FILE REFERENCE: ELITRA.034A
; CURRENT APPLICATION NUMBER: US/10/282,122A
; CURRENT FILING DATE: 2003-02-20
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/230,335
; PRIOR FILING DATE: 2000-09-06
; PRIOR APPLICATION NUMBER: 60/230,347
; PRIOR FILING DATE: 2000-09-09
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
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; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 74993
; LENGTH: 262
; TYPE: PRT
; ORGANISM: Salmorella typhimurium
US-10-282-122A-74993

Query Match          62.8%; Score 49; DB 12; Length 262;
Best Local Similarity 60.0%; Pred. No. 1.6;
Matches 9; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY      1 MRYRASALGSDGVRV 15
      :|||:|:|:|:|
Db      170 VRYMANMGPEGVRV 184

Search completed: March 30, 2004, 15:21:47
Job time : 2.19245 secs
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Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	5398	100.0	1044	14	US-10-287-216-1	Sequence 1, Appl
2	2119	33.3	1078	15	US-10-144-194A-24	Sequence 24, Appl
3	1756	32.5	1017	15	US-10-369-493-5684	Sequence 5684, Ap
4	1745	32.3	1013	12	US-10-092-900A-230	Sequence 230, App
5	1745	32.3	1013	12	US-10-336-472-128	Sequence 128, App
6	1745	32.3	1013	12	US-10-336-417-152	Sequence 152, App
7	1732	32.1	688	15	US-10-080-334-164	Sequence 164, App
8	1730.5	32.1	1018	12	US-10-336-472-126	Sequence 126, App
9	1720.5	32.1	1018	12	US-10-336-417-154	Sequence 154, App
10	1722.5	31.9	1098	15	US-10-104-047-3280	Sequence 3280, Ap
11	1714.5	31.8	1098	15	US-10-202-481-2	Sequence 2, Appl
12	1709.5	31.7	1096	12	US-10-336-472-26	Sequence 26, Appl
13	1709.5	31.7	1096	12	US-10-336-417-66	Sequence 66, Appl
14	1594.5	28.5	670	15	US-10-080-334-165	Sequence 165, App
15	1564	28.0	1100	15	US-10-369-493-5164	Sequence 5164, App

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QY 61 IGPVLVSNPYRDLQIYSRQHMERVGVGYEVPPLHFAVADTVYRALTRERDQAVMIS 120
Db 61 IGPVLVSNPYRDLQIYSRQHMERVGVGYEVPPLHFAVADTVYRALTRERDQAVMIS 120
QY 121 GESGAGKTEATKRLLOFYAETCPAPRGGAVERDRLLQSNPVLFAFGNAKTLRDNSSRF 180
Db 121 GESGAGKTEATKRLLOFYAETCPAPRGGAVERDRLLQSNPVLFAFGNAKTLRDNSSRF 180
QY 181 KYMDVQDFPKGAPVGGHILSYLLEKSRVQHNGHGFVYVQLLEGGBEETRLRLGLER 240
Db 181 KYMDVQDFPKGAPVGGHILSYLLEKSRVQHNGHGFVYVQLLEGGBEETRLRLGLER 240
QY 241 NPQSYLYLVKGCAKVSINDSKDMVKALSVIDFTEDEVEDLLSIVASVLHGLNHF 300
Db 241 NPQSYLYLVKGCAKVSINDSKDMVKALSVIDFTEDEVEDLLSIVASVLHGLNHF 300
QY 301 ADEDSNAQVTENQKYLTRLLGVGTTLRALTHRKIIAKGEBLLSPNLLEQAAYARD 360
Db 301 ADEDSNAQVTENQKYLTRLLGVGTTLRALTHRKIIAKGEBLLSPNLLEQAAYARD 360
QY 361 ALAKAVYSRTFWLVRKINRSKASDAESPSWRSTTVLGLDDIYGFVFOHNSRFPQFCIN 420
Db 361 ALAKAVYSRTFWLVRKINRSKASDAESPSWRSTTVLGLDDIYGFVFOHNSRFPQFCIN 420
QY 421 YCNEKLQQLFIELTLKSEQEEYAEAGIAWEPVQYFNKKIICDLVBEKFGIISILDEECL 480
Db 421 YCNEKLQQLFIELTLKSEQEEYAEAGIAWEPVQYFNKKIICDLVBEKFGIISILDEECL 480
QY 481 RGEATDLTFLEKLEDTVPKPHFLTHKLADOKTRKSLDRGFRLLHAGVTVYVGTGFL 540
Db 481 RGEATDLTFLEKLEDTVPKPHFLTHKLADOKTRKSLDRGFRLLHAGVTVYVGTGFL 540
QY 541 DXNNLLPRLNLTWCSSNNPMAOCDFKSEISDKRPETVATQKMSLQQLVEILRSKE 600
Db 541 DXNNLLPRLNLTWCSSNNPMAOCDFKSEISDKRPETVATQKMSLQQLVEILRSKE 600
QY 601 PAYIRCIKENDAKQPGFDEVILRHQVKYLGMLNLRVRRAGFAYRRKYEAFLQYKSLC 660
Db 601 PAYIRCIKENDAKQPGFDEVILRHQVKYLGMLNLRVRRAGFAYRRKYEAFLQYKSLC 660
QY 661 PETPMWAGRPQDGVAVLVRHLGYKPEEYKMGRTKIFIRPKTLFATEDSLEVRQSLAT 720
Db 661 PETPMWAGRPQDGVAVLVRHLGYKPEEYKMGRTKIFIRPKTLFATEDSLEVRQSLAT 720
QY 721 KIQAARWGHWRQKFLVRKRSALCIQSWWRGTLGRKKAARWAAQTIRLLIRGFLRHS 780
Db 721 KIQAARWGHWRQKFLVRKRSALCIQSWWRGTLGRKKAARWAAQTIRLLIRGFLRHS 780
QY 781 PRCPENAFPLDHVRASFLNLRRLQPLRNVLDTSWPTPPALREASELLRELCMKMWKY 840
Db 781 PRCPENAFPLDHVRASFLNLRRLQPLRNVLDTSWPTPPALREASELLRELCMKMWKY 840
QY 841 CRSISPENKQLOOKAVASEIFKGGKDNYPQSVPLFISTRIGTBEISPRVLQSLGSEPI 900
Db 841 CRSISPENKQLOOKAVASEIFKGGKDNYPQSVPLFISTRIGTBEISPRVLQSLGSEPI 900
QY 901 QYAVPVVYDRKGYKPRRQQLLTPSAVVIVEDAKVKORIDYANLTGTSVSSLSLDFVL 960
Db 901 QYAVPVVYDRKGYKPRRQQLLTPSAVVIVEDAKVKORIDYANLTGTSVSSLSLDFVL 960
QY 961 HVQEDNKKQGVVLQSDHVIETLTALSDRVNNINQGSITTFAGPGRDGIIDFTS 1020
Db 961 HVQEDNKKQGVVLQSDHVIETLTALSDRVNNINQGSITTFAGPGRDGIIDFTS 1020
QY 1021 GSELLITKAKNGHLAVAPRLNSR 1044
Db 1021 GSELLITKAKNGHLAVAPRLNSR 1044
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RESULT 2

US-10-144-194A-24

; Sequence 24, Application US/10144194A

; Publication No. US20030215809A1

```
; GENERAL INFORMATION:
; APPLICANT: Origene Technologies Inc
; TITLE OF INVENTION: Regulation: Regulated Breast Cancer Genes
; FILE REFERENCE: 3U 103 R1
; CURRENT APPLICATION NUMBER: US/10/144,194A
; CURRENT FILING DATE: 2002-06-12
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 24
; LENGTH: 1078
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-144-194A-24
```

Query Match 39.3%; Score 2119; DB 15; Length 1078;

Best Local Similarity 43.0%; Pred. No. 2.1e-183;

Matches 465; Conservative 184; Mismatches 343; Indels 90; Gaps 20;

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QY 27 VGVQDFVLENTGEAATFENLRERENLYTYIGPVLVSNPYRDLQIYSRQHMERVYR 86
Db 15 IGVGMVLEPL-NEETFINLKKRFDHSEIYTYIGSVVSNPYRSLPIYSPEKVEYR 73
QY 87 GVSFEYVPPHLFAVADTVYRALTRERDQAVMISGESGAGKTEATKRLLOFYAETCPAPE 146
Db 74 NKNFYELSPHIFALSDEAYRSRLRQDKQDCILITGESGAGKTEASKLVMSYVAAVCGKA 133
QY 147 RGGAVRDLQSNPVLFAFGNAKTLRDNSSRFQKYMVDQDFKGAAPVGGHILSYLLEKS 206
Db 134 EVNQYKEQLQSNPVLFAFGNAKTLRDNSSRFQKYMIDEFDFKGDPLGGVISNYLLEKS 193
QY 207 RVHQNCHGRNFHFVYVQLLEGGBEETLRRLGLENNPQSYLYLVKGCAKVSINDSKDMK 266
Db 194 RVVQKPRGRNFHFVYVQLLEGGBEETLRRLGLENNPQSYLYLVKGCAKVSINDSKDMK 252
QY 267 VMRKALSVIDFTEDEVEDLLSIVASVLHGLNHFADSDSN- ---AQVTENQKLYLTRL 322
Db 253 TVRNAMQIVGPMDEHAEASVLAVALKLGNIIEFKPESRVNGLDESKIKQKNEICECL 312
QY 323 LGVGGTILREALTHRKIIAKGEBLLSPNLLEQAAYARDALAKAVYRTFTWLRKINRS 382
Db 313 TGIDQSVLERAFSPRTVEAKQEKVSTTLNVAQAYARDALAKNLYSLRSLVLRNRESI 372
QY 383 ASKDAESPSWRSTTVLGLDDIYGFVFOHNSRFPQFCINCYNEKLQQLFIELTLKSEQEEY 442
Db 373 KAQTKVRKK- ---VMGVLDIYGFIEFDNSFEFIIYCYNEKLQQLFIELTLKSEQEEY 427
QY 443 EAGIAWEPVQYFNKKIICDLVBEKFGIISILDEECLRPGEATDLTFLEKLEDTVPKPH 502
Db 428 IREDIEWTHIDYFNNAIICDLIENNTNGILAMLDEECLRPGTVDTFLEKLNQVCATHQ 487
QY 503 HFLTH- ---KLADOKTRKSLDRGFRLLHAGVTVYVGTGFLDKNDLLFRNLKETWCSMN 560
Db 488 HFESRMKCSRFLNDTSLPHSCFRIQHYAGKVLYQVGFVDKNDLLYRDLQSAWMKASH 547
QY 561 PMAQCFDKSELS- ---DKRPEVATQKMSLQQLVEILRSKEPAYIRCIKENDAKQPGF 618
Db 548 ALIKSLPEGNPAKINLRKPTAGSQKASVATLMKLNQYKPNYIRCIKENDAKAAHIF 607
QY 619 DEVILRHQVKYLGMLNLRVRRAGFAYRRKYEAFLQYKSLCPETWPMWAGRPQDGVAVL 678
Db 608 NEALVCHQIRYLGLENNVRVRRAGYAFQAYEPCLERYKMLCKQTWPMWGPASSGVEVL 667
QY 679 VRHLGYKPEEYKMGRTKIFIRPKTLFATEDSLEVRQSLATKIQAARWGHWRQKFLVR 738
Db 668 FNELEIPEEYSFGRSKIFIRNPRTLFKLEDLRQRLDLATLIQTYRGMKCKTHFLM 727
QY 739 KRSALCIQSWWRGTLGRKKAARWAAQTIRRLIRGFL- ---ILRHSRCPCE- --- 785
Db 728 KKSQIVLAAYRRYAAQKRYQYQYKSSALVQSYIRGKWKARKILRELKQRCKEAVTIIA 787
QY 786 - ---NA- ---FFLDHVRASFLNLRRLQPLRNVLDTSWPTPPA 820
Db 788 AYWHGTQVRREYRKFRRANAGKKIYEFTLQRIYQKYLEMKNKPSLSPIDKNWPSFYL 847
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Qy 821 LREASSELLRELCKMVMV---KYCRSISPEWKQLOQKAVASEIFKGGKDNYPQSVPLRF 877
Db 848 FLDSTH--KELKRIFHLWRCKYRDQFDQKLYEEKLEASELFKFKKALYPSVQGP 905
Qy 878 ISTRLGTEIEISP---RVQLSGSEPIQYAVPVVKYDRKGYKPRQLLTPSVAWIVE- 932
Db 906 QGAYL---EINKPKYKKLDAIEEKIIAEBVANKINRANGKSTSRIFLLTNNLLADQ 962
Qy 933 -DAVKQRIDYANLTGTSVLSLSFLVHLVQR--EDNKQKGDVVLQSDHVIETLTK--T 987
Db 963 KSGQKSEVPVLDVTKVSMSSQNGDFFAVHLKEGSEAAASKGDFLFFSDHLLIEMATKYRT 1022
Qy 988 ALSADRVN-NINI-----NGSITFAGGPGRDGIIIFTSGSELLIIFKAKNGHLAV 1036
Db 1023 TLSQTKQKLNIEISDEFVLVQRQDKVCVFKIQGNQKNGSVP-----TCKRKNRLLLE 1074
Qy 1037 VA 1038
Db 1075 VA 1076

RESULT 3
US-10-369-493-5684
; Sequence 5684, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 5684
; LENGTH: 1017
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-10-369-493-5684

Query Match 32.5%; Score 1756; DB 15; Length 1017;
Best Local Similarity 39.1%; Pred. No. 2.5e-150;
Matches 405; Conservative 179; Mismatches 329; Indels 124; Gaps 24;

Qy 28 GVQDFVLENTSBAFTENLRFRRENLIYTYIGPVLVSNPYRDQLQYSRQHMERYRG 87
Db 12 GVEDVLLSTTDLKSV-VQNQLRQFGRIYTYIGEVILVANPYRQGIYEKSTVDQYKG 70
Qy 88 VSFVEVPHLFAVADTVYRALTRERDQAVMISGESGAGKTEATKRLQFVAETCPAPER 147
Db 71 REIYERAPHVFAIAAAYRSMKRFGRDSCIIVISGAGKTETSKIMKYLAAITNVROQ 130
Qy 148 G--GAVDRLLQSNPVLAEAFNAKTLRNDNSRSGKMYDVQDFKGPVGGHILSYLLEK 205
Db 131 GEIRSVNKLRSNCILLEAFCAKTLRNDNSRSGKMYHINFDYDGPVGGNISNYLLEK 190
Qy 206 SRVHQHNGERNHFVYQLLGGEBEETLRLGLERNPOSILYLVKGCQAKVSSINDKSDW 265
Db 191 SRVRVQGGERNHFVYQLVNGDDGLRQGLTKDAKQYVFLNQGGSHKVASINDSRDP 250
Qy 266 KVMKAL-SVIDFTEDEVEDLLSVASVLHIGNTHFAADESN--AQVTTENQLKYTRL 322
Db 251 AEVQTALRSIHTFDKQDVESMWSVIAGLIHLGNVRFDGENSGAVHIAEKAALQNAARC 310
Qy 323 LGVSGTTLREALTKRIIAKEGELLSPNLQEAAYARDALAKAVYSRTFWLVRKINRSL 382
Db 311 LNVTFDELAKSLSSQVAAAGDVIKKQHDVNAAYYTRDALAKALYERLFSMWVSKVNEAI 370

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Qy 383 ASKDAESPSMRSTTVLGLLDIYGFEVPHQNSRFQFCINYCNEKLOQLFIETLTKSEOEY 442
Db 371 SVQN--SSRYSKSHVIGVLDIYGFEITGTSFEOQLCINYCNEKLOQLFIETLTKSEOEY 428
Qy 443 EAEGIAWEPYQYFNKKIICDLVEEKFKGIISILDEECIRPGEATDLTFLKLEDTVPKPH 502
Db 429 EREGIKWVKIYFNKKVICDLVEIPRTGILSILDEACASIGNVTDKVFELGELDKLXSHK 488
Qy 503 HFLTHKLADOKTSLDRGFRLLHYAGEVYTVSGFLDKDNLLFRNLKMETKSSMNP 562
Db 489 HYTSRNL--KQSDKSMGFEFKITHYAGDVYTVSMGFMKDKOTLFDQLKLLYHSHNRL 546
Qy 563 MAQCF--DKSELSDKKRPETVATQFQWLSLLQVEILLRSEKPAVIRCIKENDAKQPGRED 619
Db 547 VKSLFPDGSMSAEVNRPPTAGLFFKNSMSELVKLAQKEPHYIRCIKNEEKNSVFD 606
Qy 620 EVLIRHQVKYGLHMLNLRVRRAGFAVRRKYEAFLQRYKSLCPTETPMWAGRP-----QD 673
Db 607 LERVEHQVRYLGLLENVRRAGFAHRMPYDRFVNRKYKLICASTWP---NPRGQQLKD 662
Qy 674 GVAIVRHLGYKPEYKMGRTKIFIRPKTLFATEDSLEVRQSLATKIQAAWRGFTWRQ 733
Db 663 SCMQILLESAGL-AQDCVQGRTKIFIRSPQTVFRLLELRETEQLPNVITFLQMWVGVQORE 721
Qy 734 KFLRVKESAICIQSWWRGTGLRRKAAKRWAAQTIRRLIRGFILRHSPCPENAFELDHV 793
Db 722 RY-----RMLAVRKIIGAYRRYKLSYIWO-----747
Qy 794 RASPLMLRQLPRNVLDTS---WPTPPALREASLELRELCKMNMVWYCRSIS---P 846
Db 748 ---LINAFRDV-RMRDLGKSIRWPAPPLVLAQFVSRLRVMHQ---WRAATILARMPP 799
Qy 847 EMKQLOQKAVASEIFKGGKDN-----YPSVPRLFISTRLGTEISPRVLQSLG 896
Db 800 HLRASLFPQKTAAPFVLNKNKNMNGYTRMWRGDLYSQQEELPTTVSYTHDGIQALRQ-- 857
Qy 897 SEP---IQYAVPVVKYDRKGYKPRPROLLITPSAVVIVEDAK---VKORIDYANLTGISV 950
Db 858 SHFPGKVLFTSYVQKFN-KFNKSLRVLIVTDREFAKLENKKFKLLKEPPLQGISISLV 916
Qy 951 SSLSDSLFVLHVQRED-----NKQKGDVVLQSDHVIE 982
Db 917 CAESNGLFVIHVGDNDIVGCAKNTKNEERVGEMIGTLAHYDKITMERSPVLIQS-AVVC 975
Qy 983 TL---TKTALSADRVN 996
Db 976 TLGKTKTIRVFDANN 992

RESULT 4
US-10-092-900A-230
; Sequence 230, Application US/10092900A
; Publication No. US2004004382A1
; GENERAL INFORMATION:
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Shenoy, Suresh G.
; APPLICANT: Taupier Jr., Raymond J.
; APPLICANT: Pena, Carol E.A.
; APPLICANT: Li, Li
; APPLICANT: Zerhusen, Bryan D.
; APPLICANT: Gusev, Vladimir Y.
; APPLICANT: Ji, Weizhen
; APPLICANT: Gorman, Linda
; APPLICANT: Miller, Charles E.
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Patturajan, Meera
; APPLICANT: Gangolli, Baha A.
; APPLICANT: Vernet, Corine A.M.
; APPLICANT: Guo, Xiaojia Sasha
; APPLICANT: Tchernev, Velizar T.
; APPLICANT: Fernandes, Elma R.

```

```

1  ; APPLICANT: Casman, Stacie J.
2  ; APPLICANT: Malyankar, Uriel M.
3  ; APPLICANT: Gerlach, Valerie
4  ; APPLICANT: Liu, Yi
5  ; APPLICANT: Anderson, David W.
6  ; APPLICANT: Spaderna, Steven K.
7  ; APPLICANT: Catterton, Elina
8  ; APPLICANT: Leite, Mario W.
9  ; APPLICANT: Zhong, Haihong
10 ; APPLICANT: Alsobrook, John P.
11 ; APPLICANT: Lepley, Denise M.
12 ; APPLICANT: Rieger, Daniel K.
13 ; APPLICANT: Burgess, Catherine E.
14 ; TITLE OF INVENTION: No. US20040043382A1el Proteins and Nucleic Acids Encoding Same
15 ; FILE REFERENCE: 21402-290C
16 ; CURRENT FILING DATE: 2002-03-07
17 ; PRIOR APPLICATION NUMBER: USSN 60/274,322
18 ; PRIOR FILING DATE: 2001-03-08
19 ; PRIOR APPLICATION NUMBER: USSN 60/283,675
20 ; PRIOR FILING DATE: 2001-04-13
21 ; PRIOR APPLICATION NUMBER: USSN 60/338,092
22 ; PRIOR FILING DATE: 2001-12-03
23 ; PRIOR APPLICATION NUMBER: USSN 60/274,281
24 ; PRIOR FILING DATE: 2001-03-08
25 ; PRIOR APPLICATION NUMBER: USSN 60/274,191
26 ; PRIOR FILING DATE: 2001-03-08
27 ; PRIOR APPLICATION NUMBER: USSN 60/325,681
28 ; PRIOR FILING DATE: 2001-09-27
29 ; PRIOR APPLICATION NUMBER: USSN 60/304,354
30 ; PRIOR FILING DATE: 2001-07-10
31 ; PRIOR APPLICATION NUMBER: USSN 60/279,995
32 ; PRIOR FILING DATE: 2001-03-30
33 ; PRIOR APPLICATION NUMBER: USSN 60/294,899
34 ; PRIOR FILING DATE: 2001-05-31
35 ; PRIOR APPLICATION NUMBER: USSN 60/287,424
36 ; PRIOR FILING DATE: 2001-04-30
37 ; Remaining Prior Application data removed - See File Wrapper or PALM.
38 ; NUMBER OF SEQ ID NOS: 768
39 ; SEQ ID NO 230
40 ; LENGTH: 1013
41 ; TYPE: prt
42 ; ORGANISM: Homo sapiens
43 ; US-10-092-900A-230

```

Query Match.	32.3%;	Score 1745;	DB 12;	Length 1013;
Best Local Similarity	41.7%;	Pred. No. 2.6e-149;		
Matches	403;	Conservative 155;	Mismatches 339;	Indels 70; Gaps 21;

QY	28	GVQDFVLLNFTSAAFIENLRPRRENLIYTI	GPULVSNVPRDLQIYGRQHMERVYG	87
		:	:	
Db	10	GKPDFVLLDQVTME-DMRNLQLRFEKRIYTI	GEVLVSNVYQELPYLGPFAIARYQG	68
		:	:	
QY	88	VSEFVEVPHLFAVADTVYRALRTERRRDQAV	MISGESGAGKTEATRLLLOFYAETCPAPER	147
		:	:	
Db	69	RELYERPHLYAVANAAYKAMKHSRDTCTVI	SGESGAGKTEASKHIOYIAAVTNSQR	128
		:	:	
QY	148	GGA--VDRLLQSNPVLFAFGNAKTLRNDSSR	FGKYMDVQDFKGPAPVGHHLSYLLEK	205
		:	:	
Db	129	AEVERVDVLLKSTCVLEAFGNARTNRHNSR	FGKYMDINFPDKGDPIGGHHLSYLLEK	188
		:	:	
QY	206	SRVVHQHNGRNPFAVYQLLEGGGEEITRLR	LGRNPQSYLYLVKGQCAKVSSINDKSDW	265
		:	:	
Db	189	SRVLKQHGVRNPFAYQLLKGSSDKQLHEHL	ERNPQVYNTFHQAGLNN-TVSDSQSH	247
		:	:	
QY	266	KVMRKALSDVDFTEDEVEDLLSIWASVHL	GNIHFAADEDSNAQ-----VTENOLKYL	320
		:	:	
Db	248	QAVTEAMRVIGFSPEEVESVHRILAAIILH	GNIEBFVETEEOGLQKEGLVAEEALVDHVA	307
		:	:	
QY	321	RLLCVEGTTILREALTHRKITAKGELLSP-	NLNLEQAAVARDALAKAVYRFTFTVLVRKIN	379
		:	:	
Db	308	ELTATPRDLVRLSLIARTVASGGRELEKHGT	AAEASVARDACAKAVYORLFEFVWVRIN	367
		:	:	

Qy	380	RSLASKDAE	SPSWRSTTVLGLLDYTGPEVFOHNSFEQCINVCNEKIQOLFIELTLKBQ	433
Dd	368	SVMSEPRGRD	PRDKGTWIGVDYTGPEVFNVSFEQCINVCNEKIQOLFELQLILKBQ	427
Qy	440	EVEAEAGI	AWEPVGFYNKKICDLVEEKFKGIIITLDEECRLPGEATDLTLEUKLEDVTVK	499
Dd	428	EVEEREGIT	WQSVEYFNNATIVOLVERPHRGILAVLDEACSSAGTITDRIFLOTIDMHR	487
Qy	500	PHPHLTHK	LADQTKRSLSRG-BFRLLHYAGEVNTSVTGFLDKXNDLLFRNLKETMCSS	558
Dd	488	HHLTYTSR	QLC--PTDKTMFERGRDFIKHYAGDVTVSVEGFDKNRDLELFQDFKELLVNS	545
Qy	559	MNPIMAQC	F-----DKSELSDKRPETVATQFKMSLLQLVLIRSKEPAYIRCIPKNDAK	613
Dd	546	TDPILRAM	WDPGQQDIETVI--KRPLTAGTULFKMSWALVENLASKEPFYVACIKPNEDK	603
Qy	614	QPGRFDEV	LIRHQVKYLGLMLNLRVRVRAGFAYRRKYEAFLORYKSCLCPETWP-MWAGRPO	672
Dd	604	VAGKLDENH	CHQHVAIXLGLLENVVRVRAGFASRQPSYSRELLRYKMTCEYTWNHLLGS DK	663
Qy	673	DGVAVLRH	LGYKEPYEYKMGRTKFIPIREPCTLFATEDSLEVVRSLATKIQAANRGFWHR	732
Dd	664	AAVSALLQE	OQHGLQ-GDVAFGHSKLUFIISPRTLVTLEOS-----R	701
Qy	733	QKFLRVRS	SAICIQSMWRGTLGRKAARKWAACOTIRRLIRGFIILRHSPRCPENAFFLDH	792
Dd	702	ARLIPI--	IVILLQKAWRGTLARW-CRRLFAITYMEWFR---RHKVRA-----HLAE	749
Qy	793	VRASFNLN	RROLPRNVLDTSWTPPPPALREASELLRELCKMNVMWKYCRSISPEWKQOL	852
Dd	750	LQRRF--	QAARQPLYGRDLVWLPFPAPVLPQFDTCIALFCRWRARQLVKNIPPMDPMQI	807
Qy	853	QOKAVASE	IFPKKKDNY--POSVPRLFISTRLGTEESIPRVLOSJ-----GSEPIOVA	903
Dd	808	KAKVAMGA	LQGLEQDWGCRAWARDYLSANTDPTASSLPAQRKITLODXDGGFVALFS	867
Qy	904	VPVXYDRK	GYPKPRPLLITPSPAVIVE--DAKVQKQIRDYANLTGISVSLSDSLFVL	960
Dd	868	SHVRKVN	R-FHKTRNRALLTDQHLXDLPDRQYRVVRVRAPELVTLGLSVTSGGDQLVV	926
Qy	961	HVQREDN	967	
Dd	927	HARGQDD	933	
RESULT 5				
US-10-336-472-128				
; Sequence 128, Application US/10336472				
; Publication No US20040043929A1				
; GENERAL INFORMATION:				
; APPLICANT: Anderson, David W.				
; APPLICANT: Ballinger, Robert A.				
; APPLICANT: Baumgartner, Jason C.				
; APPLICANT: Burgess, Catherine E.				
; APPLICANT: Casman, Stacie J.				
; APPLICANT: Chant, John S.				
; APPLICANT: Berghs, Constance				
; APPLICANT: Gangolli, Esha A.				
; APPLICANT: Edinger, Shlomit R.				
; APPLICANT: Ellerman, Karen				
; APPLICANT: Furtak, Katarzyna				
; APPLICANT: Gerlach, Valerie				
; APPLICANT: Gilbert, Jennifer A.				
; APPLICANT: Gunther, Erik				
; APPLICANT: Gorman, Linda				
; APPLICANT: Guo, Xiaojia Sasha				
; APPLICANT: Ji, Weizhen				
; APPLICANT: Li, Li				
; APPLICANT: Liu, Xiaohong				
; APPLICANT: Miller, Charles E.				
; APPLICANT: Millet, Isabelle				
; APPLICANT: Padigar, Muralidhara				
; APPLICANT: Patturajan, Meera				

; APPLICANT: Rastelli, Luca
 ; APPLICANT: MacDougall, John R.
 ; APPLICANT: Mishra, Vishnu
 ; APPLICANT: Pena, Carol E.A.
 ; APPLICANT: Spaderna, Steven K.
 ; APPLICANT: Shimkets, Richard A.
 ; APPLICANT: Smithson, Glenda
 ; APPLICANT: Spytek, Kimberly A.
 ; APPLICANT: Stone, David J.
 ; APPLICANT: Shenoy, Suresh G.
 ; APPLICANT: Ort, Tatiana
 ; APPLICANT: Taupier Jr, Raymond J.
 ; APPLICANT: Tchernev, Velizar T.
 ; APPLICANT: Vernet, Corine A.M.
 ; APPLICANT: Wolenc, Adam R.
 ; APPLICANT: Zerhusen, Bryan D.
 ; APPLICANT: Zhong, Mei
 ; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
 ; FILE REFERENCE: 21402-533C
 ; CURRENT APPLICATION NUMBER: US/10/336,472
 ; CURRENT FILING DATE: 2003-01-03
 ; PRIOR FILING DATE: 09/746,491
 ; PRIOR APPLICATION NUMBER: 10/005,041
 ; PRIOR FILING DATE: 2001-12-20
 ; PRIOR APPLICATION NUMBER: 10/023,691
 ; PRIOR FILING DATE: 2001-12-18
 ; PRIOR APPLICATION NUMBER: 10/024,212
 ; PRIOR FILING DATE: 2001-12-18
 ; PRIOR APPLICATION NUMBER: 10/055,569
 ; PRIOR FILING DATE: 2001-10-26
 ; PRIOR APPLICATION NUMBER: 10/080,334
 ; PRIOR FILING DATE: 2002-02-21
 ; PRIOR APPLICATION NUMBER: 10/092,900
 ; PRIOR FILING DATE: 2002-03-07
 ; PRIOR APPLICATION NUMBER: 10/136,926
 ; PRIOR FILING DATE: 2002-05-01
 ; PRIOR APPLICATION NUMBER: 10/236,417
 ; PRIOR FILING DATE: 2002-09-06
 ; PRIOR APPLICATION NUMBER: 60/345,092
 ; PRIOR FILING DATE: 2002-01-04
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 230
 ; SOFTWARE: CuraSeqList version 0.1
 ; SEQ ID NO 128
 ; LENGTH: 1013
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-10-336-472-128

Query Match 32.3%; Score 1745; DB 12; Length 1013;
 Best Local Similarity 41.7%; Pred. No. 2.6e-149;
 Matches 403; Conservative 155; Mismatches 339; Indels 70; Gaps 21;
 QY 28 GVQDFVLENTSEAFIENLRFRRENLIYTYIGPVLVSVNPNYQDIQYSRQHMERYRG 87
 Db 10 GKPDFVLLDQVTE--DFMRNLQRFKRGITYTYIGEVLSVSNPYQELPLGPAIARYQG 68
 QY 88 VSYEYVPPHLPVAVADTVYRALRTERDQAVNIGSGAGKTEATKRLQFYAETCPAPER 147
 Db 69 RELYERPPHLYAVANAAYKAMKHSRDTCTIVISGESGAGKTEASKHIMQYIAAVTNPSQR 128
 QY 148 GGA--VRDRLLQSNVLEAGNAKTLNDNSRFGKYMVDQFQKAPVCGHLSVILEK 205
 Db 129 AEVERVKDVLKSCVLEAFGNARTNRNHSRFGKYMDFNDFKGDPIGGHITHSVILEK 188
 QY 206 SRVYHQHGRNHFVYQQLLEGGEETRLRLGLERNPQSYLYLVKGCACVSNINDKSDW 265
 Db 189 SRVLKQHVGRNPHAFVQLLRGSDKQLHELHLERPAVYNFTHQAGLNM--TVSDQSH 247
 QY 266 KVRKALSVIDFTEDEVEDLSIVASVHLGNHFAADESNQAQ-----VTTENQLKYLIT 320
 Db 248 QAVTEAMRVIGFSPPEVESVHRILAILHLGNIEFVETEGGQKEGLAVAEALVDHVA 307

QY 321 RLLGVEGTTUREALTTHRKIIAKGEEELSP--LNLEQAAAYARDALAKAVYSRFTTWLVRKIN 379
 Db 308 ELTATPRDLVRLSILARTVASGGRELTEKGTAAEASAYARDACAKAVYQSLFEVWVNRIN 367
 QY 380 RSLASKDAESPSMRSTTVLGLLDIYGFEVFOHNSFEQPCINYNCKEQLQOLFETLKSEQ 439
 Db 368 SVMPEGRDRPRDGKDTVIGVLDIYGFEVFPVNSFEQPCINYNCKEQLQOLFETLKSEQ 427
 QY 440 EYEEAEGIAWEPVQYFNFKIICDLVBEKFKGIISILDEECLRGEATDLTFLEKLEDTVK 499
 Db 428 EYEREGITWQSVVEYFNNAIVDLVERPHGILAVLDEACSSAGTITDRFLQTLDMHHR 487
 QY 500 PHFHLTHKLADQKTRKSLDRG--EFLRLHYAGVYTVSFGFLDKNNDLLPRNLKBTWCSS 558
 Db 488 HHLHYTSRQLC--PTDKTMEFGRDFRIKHVAGDVTVSVEGFIDKNRDFLQDFKRLLYNS 545
 QY 559 MNPIMAQCF-----DKSELSDKKRPETVATQFKMSLLQLVLEILRSKEPAYIRCIKPNDAK 613
 Db 546 TDTILRAMPDGGQDITEVT--KRPLTAGTLFKNSWVALVENLASKEPFFVRCIKPNEDK 603
 QY 614 QPCRFDVLRHQVKYLGLMENLVRVRAGFAYRRKYEAFLQRYKSLCPETWP--MWAGRPQ 672
 Db 604 VAGKLDENHCHQVAVYLGLEENVVRVRAGFASRQPSRFLRYKMTCEYTPNHLGSDK 663
 QY 673 DGVAVLVRHLGYKPEYKMGRTKIFIRPKTLFATDSLEVRQSLATKIQAARWGPWHR 732
 Db 664 AAVSALLEHQGLQ--GDVAFGHSKLFIRSPRTLVTLEQS-----R 701
 QY 733 QKELRVKRSALICISQSWRGFTLGRKAAKRWAAQTIRRLIRGFIILRHSRCPENAFELDH 792
 Db 702 ARLIPI--IVLLQKAWRGTLARW--CRRRLAIYTIMRWFR-----RHKVR--HLAE 749
 QY 793 VRASFLLNLRQLPRNVLDTSWPTPPPALREASELLRELCMKNMVWKYCRSISPEWKQL 852
 Db 750 LQRRF--QAARQPLYGRDLVWPLPAVLQPPFDTCHALFCRWRAQLVKNIPSPDWPQI 807
 QY 853 QQKAVASEIFKGGKONY--POSVPRLFISTRLCTEISPRVLSL-----GSEIQYA 903
 Db 808 KAKVAAMGALQGLRQDMGCRRAWARDYLSATDPTASSLFAQLRKLTLQDKDGFVLF 867
 QY 904 VPVVKYDRKGYKPRPRLTLTPSAVVIVE--DAKVQRIDYANLTGISVSSLSDSIFVL 960
 Db 868 SHVRKYNR--FHKIRNRALLTDHLYKLDPRQYRVNRVAVLEAVTGLSVTSGDQLVVL 926
 QY 961 HVQREDN 967
 Db 927 HARGQDD 933

RESULT 6
 US-10-236-417-152
 ; Sequence 152, Application US/10236417
 ; Publication No. US20040048256A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Agee et al.
 ; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
 ; FILE REFERENCE: 21402-442C
 ; CURRENT APPLICATION NUMBER: US/10/236,417
 ; CURRENT FILING DATE: 2003-01-06
 ; PRIOR APPLICATION NUMBER: US60/318,120
 ; PRIOR FILING DATE: 2001-09-01
 ; PRIOR APPLICATION NUMBER: US60/318,430
 ; PRIOR FILING DATE: 2001-09-10
 ; PRIOR APPLICATION NUMBER: US60/322,781
 ; PRIOR FILING DATE: 2001-09-17
 ; PRIOR APPLICATION NUMBER: US60/318,184
 ; PRIOR FILING DATE: 2001-09-07
 ; PRIOR APPLICATION NUMBER: US60/361,663
 ; PRIOR FILING DATE: 2002-03-05
 ; PRIOR APPLICATION NUMBER: US60/396,412
 ; PRIOR FILING DATE: 2002-07-17
 ; PRIOR APPLICATION NUMBER: US60/322,636


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; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US60/322,817
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US60/322,816
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US60/323,519
; PRIOR FILING DATE: 2001-09-19
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 341
; SOFTWARE: Custom
; SEQ ID NO 152
; LENGTH: 1013
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-236-417-152

Query Match      32.3%; Score 1745; DB 12; Length 1013;
Best Local Similarity 41.7%; Pred. No. 2.6e-149;
Matches 403; Conservative 155; Mismatches 339; Indels 70; Gaps 21;

QY 28 GVQDFVLLNFSEAFIENLRERENLIVYICPVLSVNPYRDLOIYGRHWRVYRG 87
Db 10 GKPDVLLDQVTIME--DFMNLQRLPEKGRIRIYIYIGELVSVNPYQOELYGPETAIARYOG 68
QY 88 VSFYEVPPLHFAVADTVYRALRTERDQAVMISGESGAGKTEATKRLIQFVAETCPAPER 147
Db 69 RELYERPHLYAVANAAYKMKHRSRDTCTIVISGESGAGKTEASKHINQYIAAVTNPSQR 128
QY 148 GGA--VRORLLQSNPVLBAFNAKTLRNDNSRFGKYMVDQDFKAPGVGHIISYLEK 205
Db 129 AEVERVKDVLKSTCVLEAFAGNARTNRNHSRFGKYMDFDFKGDPIGHIISYLEK 188
QY 206 SRVHONHGERNFHFVYOLLEGREBETLRLGLERNPOSYLYLVKGQCAKVSINSKSDW 265
Db 189 SRVLKQHVGERNFHAFYQLLGSSEKQHLHELERNPAVYNFTGQAGLNM--TVSDEOSH 247
QY 266 KVMKALSVIDFTEDEVEDLSIVASVLHGNHFADEDSNAQ-----VTENQLKYLIT 320
Db 248 QAVTEAMRVIGFSPVEVSVHRILAAIHLGNIEFVETEGLQKEGLAVEAEALVDHVA 307
QY 321 RLLGVEGTILREALTHRKIAKGBELLSP--LNLEQAAVARDALAKAVYSRFTTWLVRKIN 379
Db 308 ELTATPRDLVRLSLARTVASGGRELIEBKHTAAEASVARDACAKAVYQRLFEWVWNRIN 367
QY 380 RSLASKDAESPSWRSTTVLGLDLYGFEVFOHNSPEQFCINVCNEKLOQLFIETLSEQ 439
Db 368 SVMPEGRDPRDQGTIVIGLDYGFVFPVNSPEQFCINVCNEKLOQLFIQILKQEQ 427
QY 440 BEYRAGTAMBPVQVFNKIIICDLVEEKFGIISILDECLRPGEATDLTFLEKLEDTVK 499
Db 428 BEYEREGITQCSVEYFNNAITVDLVERPHRGILAVLDEACSSAGTITTDRIFLQTLDMHR 487
QY 500 PPHFELTHKADQKTRKSLDRG--EPRLHYAGEVTSYVTGLDKNDLFPNLKXETWCSS 558
Db 488 HHLHTYSQLC--PTDKTMEGRDPRIRHYAGDVTSYVEGIDKRDOLFQDFKRLLYNS 545
QY 559 NNPIMACQF----DKSELSPKRPETVATQFMSLLQLVILRSKEPAYIRCIKPNDAK 613
Db 546 TDPTLRAMPDQGDITVET--KRPLTAGTLFKNSMVALVENLASKEFFYVRCIKPNEDK 603
QY 614 QFGRFDEVILRHQVYKLGIMENLRVRAGFAYRRKYEAFLQRYKSLCPETWP--MWAGRPQ 672
Db 604 VAGKLDENHCRHQVAYLGLLENVRVRAGFASRQPSRFLRYKMTCEYTFWPNHLLGSDK 663
QY 673 DQVAVLVRHLGVKPYKMGRTKIFRFPKTLFATEDSLEVRQRSLATKIQAAWNGFHR 732
Db 664 AAVSALLQHGQIQ--GDVAFGSHKLFIRSPRTLVLTQS-----R 701
QY 733 QKFLVRKRSACIQSWRGTGLRRKAAKRWAAQTIIRLIRGFIILRHSRCPENAFPLDH 792
Db 702 ARLIFI--IVLLQKAWRGTLARWR--CRLRLAIYIMWFR-----RHKVR-----HLAE 749
QY 793 VRASFLNLRLQRLPRNVLDTSWFTPPPALREASELLRELCKMNMVWVKYCRSISPEWKQOL 852
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Db 750 LQRRF--QAARQPPLYGRDLVWPLPAVLQFQDTCHALFCRWARQVKNIPSDMPQI 807
QY 853 QOKVASEIFKGGKDNY--PQSVPRLEFISTRGLGTEETISPRVLQSL-----GSEPIQYA 903
Db 808 KAKVAMGALQGLRQDWCRRARDYLSATDNPATSSLFAQRLKTLQDKDGFAGVILFS 867
QY 904 VPVVYDKYKPRPROLILTPSAVIVE---DAKVQRIDYANLITGISVSSLSDSFLVL 960
Db 868 SHVEKVNVR--FHKIRNRALLTDDQHLKLPDRQYRVMRVPELAVTGLSVTGGDQLVVL 926
QY 961 HVQREDN 967
Db 927 HARGQDD 933

RESULT 7
US-10-080-334-164
; Sequence 164, Application US/10080334
; Publication No. US20040002584A1
; GENERAL INFORMATION:
; APPLICANT: Pena, Carol E. A.
; APPLICANT: Shimkets, Richard A
; APPLICANT: Li, Li
; APPLICANT: Shenoy, Suresh G
; APPLICANT: Kekuda, Ramesh
; APPLICANT: Spytek, Kimberly A
; APPLICANT: Vernet, Corine A. M.
; APPLICANT: Malyankar, Uriel M
; APPLICANT: Guo, Xiaojia
; APPLICANT: Gusev, Vladimir Y
; APPLICANT: Caeman, Stacie J
; APPLICANT: Boldog, Ferenc L
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Tchernev, Velizar T
; APPLICANT: Patturajan, Meera
; APPLICANT: Gangolli, Esha A
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Liu, Xiaohong
; APPLICANT: Baumgartner, Jason C.
; APPLICANT: Gerlach, Valerie
; APPLICANT: Spaderna, Steven K
; APPLICANT: Zerhusen, Bryan D
; TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
; TITLE OF INVENTION: Using the Same
; FILE REFERENCE: 21402-275
; CURRENT APPLICATION NUMBER: US/10/080,334
; PRIOR FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: 60/270,523
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: 60/322,712
; PRIOR FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: 60/311,980
; PRIOR FILING DATE: 2001-08-13
; PRIOR APPLICATION NUMBER: 60/330,307
; PRIOR FILING DATE: 2001-10-18
; PRIOR APPLICATION NUMBER: 60/278,796
; PRIOR FILING DATE: 2001-03-26
; PRIOR APPLICATION NUMBER: 60/281,521
; PRIOR FILING DATE: 2001-04-04
; PRIOR APPLICATION NUMBER: 60/276,677
; PRIOR FILING DATE: 2001-03-16
; PRIOR APPLICATION NUMBER: 60/311,595
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/270,220
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: 60/274,295
; PRIOR FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 60/318,526
; PRIOR FILING DATE: 2001-09-10
; PRIOR APPLICATION NUMBER: 60/286,548
; PRIOR FILING DATE: 2001-04-25
; PRIOR APPLICATION NUMBER: 60/291,765
```

RESULT 8

Db 429 KQOEYEREGITWQSVYFNNAITVDLVERPHRGILAVLDEACSSAGTITDRIFLQTL 488
 Qy 496 DTVPHPHFLTHKLADQKTRSLDRG--EPRLLHAGVYVYVTGFLDKNDLLFRLNKLK 554
 Db 489 THRHHLHYTSRQLC--PTDIMEFGRDFRKHVAGDVYVSVEGFDKNDRLDFQDFKRL 546
 Qy 555 MCSNNPIMACQF-----DKSELSDDKKRPETVATQFKMSLLQQLVEILRSKEPAYIRCIKP 609
 Db 547 LYNSTDPTRLAWPDGQODITEVT--KEPLTAGTLFKNSMVALVENLASKEFFVYRICKP 604
 Qy 610 NDAKOPGRFDEVLTTHQVKYLGMLNLRVRAGFAYRRKYEAFLQRYKSLCPETWP--MWA 668
 Db 605 NEDKAVAGKLDENHCHQVAYLGLLENVRVRAGFASQPYSRFLRYKMTCEYTPNHL 664
 Qy 669 GRPDQGVAVLVRHLGYKPEEYKMGRTKIFIRFPTKLFATEDSLEVRQSLATKIQAAWRG 728
 Db 665 GSDKAAVSALLEQHLQ--GDVAFGHSKLFIRKSPRLVTLFES-----705
 Qy 729 FHMOKFLVRKRSACIQSWWRGTLGRKKAARKWAAQTIRRLIRGFILRHSRCPENAF 788
 Db 706 ---EARLIPI--IVLLQKAWRGTLARWR--CRLRLAIYTIMRWR-----RHKYRA-----750
 Qy 789 FLDHVRASEFLNLRLRQLPRNVLDTSWTPPPALREASELLRELCKMKNWVKYCRSISPEW 848
 Db 751 HLAELQRRF--QAARQPLYGRDIDVPLPAVLQFPQDTCALFCRWRARQLVKNIPPSD 808
 Qy 849 KQQLQOKAVASEIPKGGKONY--PQSVRLPFISTRLCTEISPRVLSL-----GSEP 899
 Db 809 MPQIKAKVAANGALQGLRQDWGCRARAWDYLSATNPASSLFAQLTKLRDKGFGA 868
 Qy 900 IQYAVPVVYKRGYKPRPQLLLTPSAVIVE---DAKVOKRIDYANLTAIGSVSSLSDS 956
 Db 869 VLFSSHVYKVNRR--FKIRNRALLTLDQHLKLDPRQYVRMRAVPLEAVTGLSVTSGDQ 927
 Qy 957 LFLVHLVQREDN 967
 Db 928 LVLVHARGQDD 938
 RESULT 10
 US-10-104-047-3280
 ; Sequence 3280, Application US/10104047
 ; Publication No. US20030236392A1
 ; GENERAL INFORMATION:
 ; APPLICANT: HELIX RESEARCH INSTITUTE
 ; TITLE OF INVENTION: No. US20030236392A1e1 full length cDNA
 ; FILE REFERENCE: H1-A0105
 ; CURRENT APPLICATION NUMBER: US/10/104,047
 ; CURRENT FILING DATE: 2002-03-25
 ; PRIOR APPLICATION NUMBER:
 ; PRIOR FILING DATE:
 ; NUMBER OF SEQ ID NOS: 4096
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 3280
 ; LENGTH: 1098
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-104-047-3280
 Query Match 31.9%; Score 1722.5; DB 15; Length 1098;
 Best Local Similarity 38.2%; Pred. No. 3.3e-147;
 Matches 401; Conservative 152; Mismatches 303; Indels 193; Gaps 23;
 Qy 28 GVQDFVLEENFTSEAFIENLRFRRENLYTYIGPVLVSVNPNYRDLQIYRQHMERYRG 87
 Db 18 GVDDWLLPQIT--EDAIAENLRFRFMDYITFTIGSVLISVNPFKQMPYPTDIEDLYQG 76
 Qy 88 VSYFVPPHPLFAVDATYRALRTERDRDQAYMISGESGAGKTEATKRLQFYAETCPAPER 147
 Db 77 AAQYENPPHIYALTDNMYRNWMLDCENQCQVIIISGESGAGTVAKYIMGVISKVSQGGK 136
 Qy 148 GGAVRRLQSNPVLFAFGNAKTLRNDNSRFRKYMVDVDFKGAQVGGHILSYLLEKSR 207

Db 137 VQHVKDIILOSPLLEAFNAKIVRNNSRFRGKYFEIQSRGGEPPGGKISNLFLEKSR 196
 Qy 208 VYQNHGERNPHFYQYLLGEEBETLRLGLERNPQSYLXVLKGCQCAKVSINDKSDWKV 267
 Db 197 VVQENERNPHIYQYLLGEEBETLRLGLERNPQSYLXVLKGCQCAKVSINDKSDWKV 255
 Qy 268 MRKALSVIDTEDEVEDLLSIVASVHLGNHFAADEDSN--AQVTENQLKYLTRLIGVE 326
 Db 256 TLSVMQVIGIPSPSIQQLVLQVAGILHGNISFC--EDGNVYARVESVLLAFAPYLLGID 313
 Qy 327 GTTLREALTHRKIIA-----KGEELLSPNLQAAAYARDALAKAVYSRTFTWLVRKINRSL 382
 Db 314 SGRLOEKLTRKMDSRWGRGSEINVTINVEQAAAYTRDALAKGLYARLFLVLRINRAM 373
 Qy 383 ASKDAASPSWRSTTVLGLLDIYGFVFOHNSPFOFCINYCNEKILQQLFIETLKSEOEY 442
 Db 374 -QKPQBEYS-----IGVLDIYGFVFOHNSPFOFCINYCNEKILQQLFIETLKSEOEY 426
 Qy 443 EASGIAWEPVOYFNKKIICDLVEEKF--CIISILDECI--RPGEATDLTFLEKLEDT 497
 Db 427 VQGIWRTPIQYFNKVVCDLIENKLSPPGIMSVLDDVCAIEMHATGGADOTLLKQLQAA 486
 Qy 498 VKPHPHFLTHKLADQKTRKSLDRGEFRLHYAGEVTVSVTGFLDKNDLLFRLNKLK 557
 Db 487 VGTHEHF-----NSWSAG--FVHHYACKVSVYSGFCERRDVLFSLLIELMQT 534
 Qy 558 SMNPIMACQFDELSDDK--RPTVATQFMSLLQQLVEILRSKEPAYIRCIKPNDAKQPG 616
 Db 535 SEQAFRLMFLPEKLDGDKGRPSTAGSKIKQANDLVATLMRCTPHYIRCIKNETKPR 594
 Qy 617 RPEVILIRHGVKYLGLMNLVRERAGFAYRRKYEAFLQRYKSLCPETWPNWAGPDQVA 676
 Db 595 DWENRKKQVEYLGUKENIRVRAGFAYRRKYEAFLQRYKSLCPETWPNWAGPDQVA 654
 Qy 677 VLVRHLGYKPEEYKMGRTKIFIRFPTKLFATEDSLEVRQSLATKIQAAWRGPHWRQKFL 736
 Db 655 HLLRAVNMPEPQYQMGSTKVFVKNPESLFLLEBVRERKDFGFPARTIQAW-----704
 Qy 737 RVKRSACIQSWWRGTLGRKKAARKWAAQTIRRLIRGFILRHSRCPENAFFLDHVRAS 796
 Db 705 -----RRHVAVRKY-----713
 Qy 797 FLILNRLRQLPRNVLDTSWTPPPALREASELLRELCKMKNWVKYCRSISPEWQQLQOKA 856
 Db 714 -----EEMRE-----718
 Qy 857 VASEIFKGGKDNYPQSVPRFLFISTRIGTEISPRVLQSLGS--EPIQYAVPVVYKRGYK 915
 Db 719 EASNILLNKKERRNSINRNFVGDYLGLEE--RPELQFLGKREVDFAVSVKYDRR--FK 776
 Qy 916 PRPRQLLLTPSAVIVVEDAKV-----KORIDYANITGIVSVLSLSLFLVHLV 962
 Db 777 PIKRDILTPKCVYVIGREKVKKPGQGVCEVKKKVDIQALRGVSLSTRQDDFFIL-- 834
 Qy 963 QREDNKKQGDVVLQSDHVIETLTKT--ALSADRVNNINQSGITFA-----1007
 Db 835 -QED-----AADSFLSVKFTFVSLCKRFEATRRLPLFTFSDTLQFRVKKEGW 884
 Qy 1008 GQPGRDIIDFTSGSELLITKAKNGHAY 1036
 Db 885 GGGGTRSVTFSRGFGDLAVLKVGGRTITV 913

RESULT 11

US-10-202-481-2

; Sequence 2, Application US/10202481

; Publication No. US20040018567A1

; GENERAL INFORMATION:

; APPLICANT: Vallone, Marcy K

; APPLICANT: Wong, Brian R

; APPLICANT: Masuda, Estaban

; APPLICANT: Powell, Mark

; TITLE OF INVENTION: Modulators of B-lymphocyte Activation, Myosin-1F Compositions ar

:	TITLE OF INVENTION:	cf Use
:	FILE REFERENCE:	A-71312/RMS/TAL/DHR
:	CURRENT APPLICATION NUMBER:	US/10/202,481
:	CURRENT FILING DATE:	2002-07-23
:	NUMBER OF SEQ ID NOS:	15
:	SOFTWARE:	PatentIn version 3.1
:	SEQ ID NO 2	
:	LENGTH:	1098
:	TYPE:	PRT
:	ORGANISM:	Homo sapiens
:	US-10-202-481-2	

Dbb	719	EASNILLNKKERRRNSINRFVGDYLGLEE-RPELRQFLGKCKERVDFADSVTKDYRR-FK	776
Qy	916	PRPRLLTFSVAIVVEDAK-----VKQRIDYANLTIGTSSSLSDSFLVLHV	962
Dbb	777	PIKRDLILTPKCVVITGREMKKGPEKGVCEVLKKKVDIQALRGVSLSTRQDDFIL--	834
Qy	963	QREDNKQGDVQLQSDHVIETLTKT---ALSADRNNININQGSITFA-----	1007
Dbb	835	-QED-----AADSFLIESVFKEFVSLLCKREEATRPLPTFDSTLOFRVKKEGW	884

Query Match 31.8%; Score 1714.5; DB 15; Length 1098;
Best Local Similarity 38.1%; Pred. No. 1.8e-146;
Matches 400; Conservative 152; Mismatches 304; Indels 193; Gaps 23;

QY 28 GVQDFVLLNFSEAAFIENRRRPPENLIYIYIGVLVSNNPYEDLOIYSRQHMERYG 87
DB 18 GVDDWVLLPQIT-EDAIANLRKRFMDYFIYIGSVLISVNNPFQMPYFTDREIDLQ 76
QY 88 VSFYEYPHFLAVADVTVYRALTERDDQAVMISGSGAGKTEATKRLQLQFAVETCPAPER 147
DB 77 AAQYENPHIYALTDNNMYRMLDNCENQCVIISGSGAGKTVAAKYINGYISKVSGGEX 136
QY 148 GGAVRDLQSNPVLFAFNKATLRNDNSRRGKYMVDQDFKGPAPVGGHLSVYLLEKSR 207
DB 137 VQHVKDIIILQSNPLLEAFNAKTVRRNNSRRGKYFEIQFSRGSGPDDGKISNFILEKSR 196
QY 208 VVHONGERNEHFVYQLLEGSGEETLRRLGLEENQSVLYLVKGQCAKVSINKDKSV 267
DB 197 VVQNNERNRHHIYQLLEGASQEQRONLGL-MTPDYIYLLNQSDTYQVQDGTDRSDR 255
QY 268 MRKALSVIDFTEDEVEDLLSIVASVHLGNHFAADEDSN-AQVTENOLKYLRLGLVE 326
DB 256 TLLSAMQVIGPISQIQLVQLVAGILHLGNISFC--EDGNVARSVDLLAPFAYLIGID 313
QY 327 GTTLREALTHRKIIA-----KGELISPLMLEQAAYARDALAKAVYSRTFTWLVRKINRSL 382
DB 314 SGRLOKLTSTRKMSRWGGRSSEINVLNVEQAAYTRDALAKGLVARLDFELVEAINRAM 373
QY 383 ASKDAESPMSRTVVLGLDIIYGFVFNHNSFEQRCINCYNEKLOOLFIETLXSEQBEY 442
DB 374 -OKPQBEYS-----IGVLDIYGFIFQKNGEFCINFVNEKLOQFIETLXAEQBEY 426
QY 443 EAEGIAWEPVQVFNKKIICOLVEERFK--GIISILDEECL--RPEATDITFLEKLEDT 497
DB 427 VQEGIRWTPIQVFNKKVCDLLENKLSPPGINSVLDVCAVTHATGGGADOTLLQKIQAA 486
QY 498 VKPHPHLTHKLADQKTRKSLDRGFRLLHYAGEVTVYVGTFLDKNDLLFLRNLEKTMCS 557
DB 487 VGTHEHF-----NSWSAG-FVIHHYAGKVSVDVSGFCERNRDLVFSDLIELMOT 534
QY 558 SMNPIMAQCFKSELSDKK-RPETVATQPKMSLLQVLEILRSKEPAYIRCIKPNDAQPG 616
DB 535 SQQAFIRMLFPBKLDGKGRSTAGSKIKQANDLVATLMRCTPHYIRCIPKNETKHAR 594
QY 617 RFEVLIRHQVLYGLIMENLRVRRAGFAYRRKYEAFLQRYKSLCPETWPMWAGRPQGVA 676
DB 595 DWEENRVKHQVYGLGKINIRVRAGFAYRRQFAKLQRYAILPETWPRWRGDERQGVQ 654
QY 677 VLVRHLYGKPEYKMGRTKIFIRPKTIFATEDSLSEVRQSLATKIQAAMRGFWKQFL 736
DB 655 HLLRAVNMEDPQVQMGSTKVFVNKPESILFLEVEERKFPDGFARTIQKAW----- 704
QY 737 RVKRSACIQSWRGTGLGRKAAKRWAAQTIRLLIRGFIIRHSPRCPENAFLLDHVRAS 796
DB 705 -----RRHVAVRKY----- 713
QY 797 FLINLRQLPRNVLDTSWTPPPALREASEILRELCKMNMVWKYCRSISPEWKQLQOKA 856
DB 714 -----ENRE----- 718
QY 857 VASEIFKGKKNYQSVPRFLFSTRLGTETISPRVLQSLG-SEPIQVAVPVVYKDRGKYK 915

QY 1008 GCGRGRGIIIDFTSGSELLITKAKNGHLAV 1036
DB 885 GCGGTRSVTFSGRFGDLAVLKVGGRITLV 913

RESULT 12
US-10-336-472-26
; Sequence 26, Application US/10336472
; Publication No. US20040043929A1
; GENERAL INFORMATION:
; APPLICANT: Anderson, David W.
; APPLICANT: Ballinger, Robert A.
; APPLICANT: Baumgartner, Jason C.
; APPLICANT: Burgess, Catherine E.
; APPLICANT: Casman, Stacie J.
; APPLICANT: Chant, John S.
; APPLICANT: Bergna, Constance
; APPLICANT: Gangolli, Esha A.
; APPLICANT: Edinger, Shomit R.
; APPLICANT: Ellerman, Karen
; APPLICANT: Furtak, Katarzyna
; APPLICANT: Gerlach, Valerie
; APPLICANT: Gilbert, Jennifer A.
; APPLICANT: Gunther, Erik
; APPLICANT: Gorman, Linda
; APPLICANT: Guo, Xiaojia Sasha
; APPLICANT: Ji, Weizhen
; APPLICANT: Li, Li
; APPLICANT: Liu, Xiaohong
; APPLICANT: Miller, Charles E.
; APPLICANT: Millet, Isabelle
; APPLICANT: Padigaru, Muralidhara
; APPLICANT: Patturajan, Meera
; APPLICANT: Rastelli, Luca
; APPLICANT: MacDougali, John R.
; APPLICANT: Mishra, Vishnu
; APPLICANT: Pena, Carol E.A.
; APPLICANT: Spaderna, Steven K.
; APPLICANT: Shinkets, Richard A.
; APPLICANT: Smithson, Glenda
; APPLICANT: Spytek, Kimberly A.
; APPLICANT: Stone, David J.
; APPLICANT: Shenoy, Suresh G.
; APPLICANT: Ort, Tatiana
; APPLICANT: Taupier Jr, Raymond J.
; APPLICANT: Tcharnev, Vellizar T.
; APPLICANT: Vernet, Corine A.M.
; APPLICANT: Wolenc, Adam R.
; APPLICANT: Zerhusen, Bryan D.
; APPLICANT: Zhong, Mei
; TITLE OF INVENTION: NOVEL PROTEINS AND NUCLEIC ACIDS ENCODING SAME
; FILE REFERENCE: 21402-533C
; CURRENT APPLICATION NUMBER: US/10/336,472
; CURRENT FILING DATE: 2003-01-03
; PRIOR APPLICATION NUMBER: 09/746,491
; PRIOR FILING DATE: 2000-12-20
; PRIOR APPLICATION NUMBER: 10/005,041
; PRIOR FILING DATE: 2001-12-04
; PRIOR APPLICATION NUMBER: 10/023,681
; PRIOR FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: 10/024,212
; PRIOR FILING DATE: 2001-12-18

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; PRIOR APPLICATION NUMBER: 10/055,569
; PRIOR FILING DATE: 2001-10-26
; PRIOR APPLICATION NUMBER: 10/080,334
; PRIOR FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: 10/092,900
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: 10/136,826
; PRIOR FILING DATE: 2002-05-01
; PRIOR APPLICATION NUMBER: 10/236,417
; PRIOR FILING DATE: 2002-09-06
; PRIOR APPLICATION NUMBER: 60/345,092
; PRIOR FILING DATE: 2002-01-04
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: CuraSeqList version 0.1
; SEQ ID NO 26
; LENGTH: 1096
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-336-472-26

Query Match          31.7%; Score 1709.5; DB 12; Length 1096;
Best Local Similarity 38.2%; Pred. No. 5 le-146;
Matches 400; Conservative 148; Mismatches 307; Indels 193; Gaps 23;

Qy 28 GVQDFVLLNTSAAFTENLRFRRENLIYTGIVLVSNVPRDLQIYRQHMERYRG 87
Db 18 GVDWMVLLPQT-EDAIANLRKFRMDYIFTYIGSVLISVNPFPQMPYFTDREIDLYQG 76

Qy 88 VSFYEVPHLFAVDTVYRALRTERDQAVMISGESGAGKTEATKRLQFOAETCZPAPER 147
Db 77 AVQENPHIYALTDMTRNMLIDCENCVIISGESGAGKTVAAKYIMGYISKVSQGGGK 136

Qy 148 GGAVDRLLQSNPVLEAFGNAKTLRNDNSSRFKGMVDQPDFKAPVGGHILSVLLEKSR 207
Db 137 VQHVKDIILQSNPLLEAFGNAKTVRNNSRFKGYFQFSRGGEPPGGKISNLFLEKSR 196

Qy 208 VVQHNGERNPHYVQLLEGEEETLRKGLERNPQSYLYLVKQCQAKVSSINDKSDWKV 267
Db 197 VVMQENERNPHIYQLLEGASQEQRLNGL-MTPDYVYVYLNQSDTYQVGDGTDSDRSGE 255

Qy 268 MRKALSVIDFTEDEVEDLSTVASVHLGNTHFAADESDNAQVTTENQLKYLTRLLGVGE 327
Db 256 TLSAMQVIGPSPSTQQVLQVLVAGILHGNISFC-EDGNVARYVESVDLAFPAYLLGIDS 313

Qy 328 TTIREALTRHKIIA---KGEELSLPNLEQAAAYARDALAKAVYSRTTWLVRKINSLA 383
Db 314 GRLQEKLTSRKMDSRWGRSGESINVTLNVEQAAVTRDALAKGLYARLDFLVEAINRAM- 372

Qy 384 SKDAESPSWSTTVLGLDIDYGRVFOHNSPEQCINVCNEKLOOLFIELTKSEOEYE 443
Db 373 QKPOEYS-----IGVLDIYGEIFQKNGFEQFCINFVNEKLOQIIFIELTKAEQEYV 426

Qy 444 AEGTAWEPVOVFNKKICDIVEEFK-K-GIISILDECL---RPEATDITLFEKLEDTV 498
Db 427 QEGIRWTPIQYFNNKVVCDLIENKLSPPGMSVLDDVDCATWHTATGGGADOTLLQKLAQV 486

Qy 499 KPIHPHFTHLADQKTRKSLDRGEFRLTHYAGEVTVSGTGLDKNNDLLFRNLKBTWCSS 558
Db 487 GTHEHF-----NSWSAG-FVHHYAGKVSVDVSGFCERNRDLVPSDLIELMQTS 534

Qy 559 MNPIMACQFKSELSDKK-RPETVATQFKMSLLQLVEILRSKEPAYTRCIPKNDAKOPGR 617
Db 535 -EQFLRMFLPEKUDGDKKRPSTAGSKIKQANDLVATLMRCTPHYTRCIPKNETKRPD 593

Qy 618 FDEVLIRHQVKYLGIMENLRVRAGFAYRKRYEAFLORYKSLCPETWPMWAGRPDQGVAV 677
Db 594 WEENRVKHQVEYLGLENIRVRAGFAYRKQFAKFLQRYAILTPETWPRWRGDERQGVQH 653

Qy 678 LVRLHGYKPEYKXGRTKTIFIRPKTLFATEDSLSEVRQSLATKIOAMRGFHWKQFLR 737
Db 654 LLRAVNMEPDQYQMGSTKVFVKNPESFLLEEVREKFDGFAKTIQKAW-----702

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Db 1 VEDMAEL-TYLNPSVLHNLKRYKADLIITYSGVLVSVNPNYKRLPIYTBEEFIKRYGK 59
Qy 89 SFYVPPHLFAVATVYRALMTERDOQAVMISGSGAGKTEATKRLQFVAETCPAPERG 148
Db 60 RRYELPHIFAIADAEVMSLSDKENSILISGSGAGKTEKTKVMQYLA-----AVSGG 115
Qy 149 -----GAVDRLLQSNPVLEAFNAKTLRDNNSRFGKYMDOVDFKGAAPVGGHLSYLL 203
Db 116 NGKVGVRVEDQILQSNPILFAFNAGNAKTRNNNSRFGKYIEIQDKTKIVGAKIENYLL 175
Qy 204 EKSVMHQNCHGRNFHVFYQLLEGEBETLRLGLERNPOSYLIVKQCAKVSINDKS 263
Db 176 EKSVMVQTPGERNFHIFYQLLAGASQQLKELNL-TDPDDYHVLNCGCYTVDGIDDS 234
Qy 264 DWKMRKALSVIDFTEDEVEDLLSIVASVLHLGNIHF-----AADSDSNAQVTTENQL 316
Db 235 EFKETDKAMDLTGFSDDEEQLSIFRVAAILHLGNIKFKQRRKEAARPDOT-----KAL 288
Qy 317 KYLTRLIGVEGTTUREALTHRKIIITAKGEELISPLNLOAAYARDALAKAVYSRTFTWLVR 376
Db 289 QIAAELLGVDAKELEKALLSRRIKGTGGVTPQNVQANAYARDALAKALYSRLFDMIVN 348
Qy 377 KINRSLASKAESPSWSTTVLGLDIYGFVFGHNSFQFCINYNCKEKLQOLFIELTLK 436
Db 349 RINKSLDFKAKGANGF-----IGVLDIYGFIEFEKNSFEQICINYNTEKLLQFFNHHMFK 403
Qy 437 SEQEYEAEGIAEPVQYFNKKIICDLVEBKFGIISILDEECILRPOEATDLTFLEKLED 496
Db 404 LEQEEYKREGIEWTFIDFGNQPCIDLIEKKPPGILSLDBECRFP-KATDQTFELDKLYS 462
Qy 497 TVKXPHFLTHKLADQKTRSLDRGEPRLHYAGEVTVYTGFLDKNDLLFRNLKETMC 556
Db 463 EFSNHPFKPRQKKS-----FIKHVAGDVEYNVEGLEKKNKDLPLFDLIELLK 514
Qy 557 SSMNPMAOCF-----DKSELSDKRPE-----TVATOPKMSLLQLVLILSKEPAYI 604
Db 515 SSSNPFLAEFLPDEEADPSLSKRRKITKSNFIVTGAQFKESLNTLMTLSSTNPHFV 574
Qy 605 RCIKPNDAKQPGFDEVLIRHVKYLGMLNLRVRRAGFAYRRKYEAFLORYKSLCPETW 664
Db 575 RCIKPNEKKPGVFDASVLHQLRCLGVLSGIRIRAGFSRITPFEFLORYILAPKTW 634
Qy 665 PMWAGRPQDGA-VLVRHLGYKPEEYKMGRTKIFIR 699
Db 635 PKWSGAKKACGACELLQALNLDKEEYQFGTKIFFR 670

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RESULT 15
US-10-369-493-5164
; Sequence 5164, Application US/10369493
; Publication No. US20030233675A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Yongwei
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; FILE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 5164
; LENGTH: 1100
; TYPE: PRT
; ORGANISM: Caenorhabditis elegans
US-10-369-493-5164

Query Match 29.0%; Score 1564; DB 15; Length 1100;
Best Local Similarity 34.7%; Pred. No. 9.7e-133;

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Matches 367; Conservative 172; Mismatches 320; Indels 200; Gaps 21;
Qy 27 VGVODFVLLBNFTSEAAFIENLRFRFRNLIYTYIGPVLVSNPNYRDLQIYSRQHMERYR 86
Db 14 VGDDMDVLLPKLT-EQSVENLKKRLQANSIFTYIGPVLVSNPNFKQMPYFTEKEMLLYQ 72
Qy 87 GVSFYEYPPHLEFVADTVYRALMTERDOQAVMISGSGAGKTEATKRLQFVAETCPAPE 146
Db 73 GAQYENAPHIYALADNMVNLMDINESQCVLISGESGAGKTVNAKIFIMYISISGGG 132
Qy 147 RGGAVDRLLQSNPVLEAFNAKTLRDNNSRFGKYMDOVDFKGAAPVGGHLSYLLSLEKS 206
Db 133 KVQHIDVILQSNPFLLEAFNCSATVRNWSRFGKVEIVFSRGGEPIGGKLSNFILEKS 192
Qy 207 RVVHQHNGENFHFVQLLEGEBETLRLGLERNPOSYLIVKQCAKVSINDKSNDWK 266
Db 193 RVVHQHNGEDRNFHFVQLCAGADKNLRSTFGI-GEIQYNYNLNMSGVFKADDDDDGKEFE 251
Qy 267 VMRKALSVIDFTEDEVEDLLSIVASVLHLGNIHFADSDSNAQVTTENQLKYLTRLIGVE 326
Db 252 STLHMKVGVNDQDQLEVLIRIVATVHLHGNITF-TEENNFAVSGKYLEYFAFLGLT 310
Qy 327 GTTLREALTHRKIIIAK-----GEELLSPLNLEQAAYARDALAKAVYSRTFTWLVRKINRSL 382
Db 311 SADIEAKLTGRKMESKMGTKQKEIDMKLVNQASYYTDDAWVKAIYARLFDYLVKKVNDAM 370
Qy 383 ASKDAESPWSRSTTVLGLDIYGFVFGHNSFQFCINYNCKEKLQOLFIELTLKSQEEY 442
Db 371 ---NITSQTSNDNFSGVILDIYGFIEFNNGEFGQFCINFVNEKLOQFIELTLKAEQEEY 427
Qy 443 EABGIAWEPVQYFNKKIICDLVEEKF-KGIISILDEECLR-----PGEATDLTELEKEDTV 498
Db 428 VREGINKWTEIDYFNKIVCDLITETKPPGIMSLDDTCAQNHGQRGVDRQLTTLSKSF 487
Qy 499 KPHPHFLTHKLADQKTRSLDRGEPRLHYAGEVTVYTGFLDKNDLLFRNLKETWCSS 558
Db 488 AGHPHE-----GFGSDSFVIKHVAGDVTYVDFGCDRNDVLYPDILLMQKS 535
Qy 559 MNPMAOCFDKS-ELSDKXRPETVATQFMMSLLQVLVEILRSKEPAVIRCIKPNDAKQPGR 617
Db 536 SRPFFQALPENVAAAGAKRPTTFTSKIRTOANTLVESLMKSGSPHYVRCIKNETKRPN 595
Qy 618 FDEVLIRHVKYLGMLNLRVRRAGFAYRRKYEAFLORYKSLCPETWPMWAGRPQDGA 677
Db 596 WEESRVKHQVHVEYLGRNIRVRAGFAYRRADKFAQRYATVSPQVWPFCFQGGQQAACBI 655
Qy 678 LVRLHGYKPEEYKMGRTKIFIRPPTFEATEDSLEVRQSLATKIQAARGFHWKQFLR 737
Db 656 ICDSVHMEKNQYOMGKTKLIVKNPESLFLLEETREKFPDGYARVIOKAMRQFSAR----- 710
Qy 738 VKESAICIQSWWRGTLGRKKAARKWAQTIIRRLIRGFLRHSRCPENAFFLDHVRASF 797
Db 711 ----- 710
Qy 798 LLNLRQLPRNVLDTSWPTPPPALREASSELLRELCMNVMVKYCRSISPEMKQQLQOKAV 857
Db 711 -----KQHIKQEQ 719
Qy 858 ASEIFKGGKONYPQSVPLRFLSTRLGTBEEISPRVLQSL--GSEPIQYAVPVVYKDRKGK 915
Db 720 AADLMVGKERRRYSLNRFNVDYIGLEH--HPTQLSLVGKQRVLFACTANKYDRK-FR 776
Qy 916 PRPROLLATPSAVVIVEDAKV-----KQRTDYANLTIQISVSSLSDSFLVLHV 962
Db 777 VTKLDDLLTVNHLTLIGKEKVNKGPEKGIKEVIKRFQDLPOIKSIGLSPYQDDFVILYL 836
Qy 963 QREDNKQKQGVVLQSDHVIETLK-----TALS-----ADRVNN-----ININQSI 1004
Db 837 GNDDYSS-----LLETFKTEFTALS KAYKERTNGTLHLDFRSSHVVSYYKMKF 886
Qy 1005 TFAGGF-----GRDGIIDFTSGSELLITKAKNGLHVA 1038
Db 887 DFDGKRTVQFGNDG-----TSSAEK--TLKPNKVLNVS 919

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Search completed: March 30, 2004, 15:21:46
Job time : 82.8075 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: March 30, 2004, 15:07:28 ; Search time 33.4868 Seconds
(without alignments)
1609.516 Million cell updates/sec

Title: US-09-893-371A-1

Perfect score: 5398

Sequence: 1 MYRASALGSDGVRVTMSA.....LITKAKNGHLAVAPRLNGR 1044

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued_Patents_AA.*

1: /cgn2_6/prodata/2/iaa/5A COMB.pap.*

2: /cgn2_6/prodata/2/iaa/5B COMB.pap.*

3: /cgn2_6/prodata/2/iaa/6A COMB.pap.*

4: /cgn2_6/prodata/2/iaa/6B COMB.pap.*

5: /cgn2_6/prodata/2/iaa/PCUTUS COMB.pap.*

6: /cgn2_6/prodata/2/iaa/backfileseq.pap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1191	22.1	1939	4	US-09-310-187A-1
2	1190	22.0	1972	4	US-08-875-435B-4
3	1169.5	21.7	1972	4	US-08-875-435B-3
4	1150.5	21.3	1285	4	US-09-976-594-507
5	1146	21.2	1120	4	US-09-147-404-1
6	1105	20.5	2548	4	US-09-172-422-1
7	1078.5	20.0	1236	4	US-09-883-134-4
8	1018	18.9	1886	4	US-08-338-105-3
9	575.5	10.7	1895	4	US-09-866-108A-15753
10	519.5	9.6	1581	4	US-09-866-108A-15754
11	497	9.2	2568	4	US-09-866-108A-3
12	160	3.0	1809	3	US-09-012-515A-12
13	160	3.0	1809	3	US-08-360-144A-12
14	160	3.0	1809	4	US-09-012-504A-12
15	160	3.0	1809	4	US-09-012-399A-12
16	160	3.0	2549	4	US-08-471-112A-3
17	160	3.0	2549	5	PCT-US95-06722-12
18	154	2.9	2549	4	US-08-265-967C-1
19	154	2.9	2549	4	US-08-305-790B-2
20	152.5	2.8	103	3	US-08-305-223-395
21	132.5	2.5	3878	4	US-09-914-259-11
22	130	2.4	1529	4	US-09-134-001C-3945
23	126	2.3	567	4	US-09-134-001C-3762
24	124	2.3	1093	5	PCT-US93-03077-1
25	123.5	2.3	1333	3	US-09-356-952-2
26	123.5	2.3	1333	4	US-09-376-594-312
27	122.5	2.3	1319	2	US-08-290-731C-2

28	122.5	2.3	1336	2	US-08-290-731C-6
29	122	2.3	852	4	US-09-438-833-5
30	122	2.3	813	4	US-09-438-833-12
31	122	2.3	826	1	US-08-785-241-6
32	122	2.3	826	2	US-08-480-473B-2
33	122	2.3	826	3	US-08-915-213-2
34	122	2.3	826	3	US-09-148-547-2
35	122	2.3	826	3	US-09-235-217-2
36	122	2.3	826	4	US-09-380-662-23
37	122	2.3	826	4	US-09-438-833-1
38	122	2.3	826	4	US-09-702-705-330
39	122	2.3	826	4	US-09-736-457-330
40	122	2.3	826	4	US-09-383-581-2
41	122	2.3	826	4	US-09-614-124B-330
42	122	2.3	826	4	US-09-671-325-330
43	122	2.3	826	4	US-09-589-184-330
44	122	2.3	826	5	PCT-US96-10251-2
45	122	2.3	1657	1	US-08-287-959-1

ALIGNMENTS

RESULT 1

US-09-310-187A-1

; Sequence 1, Application US/09310187A

; Patent No. 6358751

; GENERAL INFORMATION:

; APPLICANT: Benichou, Gilles

; APPLICANT: Fedoseyeva, Eugenia

; TITLE OF INVENTION: Involvement of Autoantigens in Cardiac

; FILE REFERENCE: USCF-090

; CURRENT APPLICATION NUMBER: US/09/310,187A

; CURRENT FILING DATE: 1999-05-12

; NUMBER OF SEQ ID NOS: 3

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 1

; LENGTH: 1939

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-310-187A-1

Query Match 22.1%; Score 1191; DB 4; Length 1939;
Best Local Similarity 35.6%; Pred. No. 9.6e-104;
Matches 281; Conservative 142; Mismatches 303; Indels 64; Gaps 18;

QY	4	RASALGSDGVRVTME-----SALTARDRV-----GVQDFVLEENFTSEAAFIENLR	49
DB	48	KAKILSRGKGKVIATENGKTVTVKEDQVLOQNPFPKFKIQDMAML-IFLHEPAVLFNJK	106
QY	50	RFRENLIYTYIGFVLVSVNPNYRDIQIYSRQHMERGRVSFYVEPPHLPFAVADTVYRALR	109
DB	107	ERYAAMWITYSGLFCVTNPNYKWLFPVNAEYVAAAYRKKRSEAPPFHIFSIDNAYQYML	166
QY	110	TERRDQAVMISGESGAGKTEATKRLQFVAETCPAPERG-----GAVDRLLQSNP	160
DB	167	TDRENQSLITIGESGAGKTVNTRVQIFASTAAIGDRKKDNANANKGTLSDQTIQANP	226
QY	161	VLEAFGNKTLRNDSSRFKYMVDYQDFKGPAPVGGHILSYLLEKSRVHVQNHGERNFHV	220
DB	227	ALEAFGNKTVRNDSSRFKGFIRHFAGATGKLASADIETYLEKSRVIFQLKAERNYHI	286
QY	221	FYOLLEGEBEETLRRLGLERNPQSVLYLVKGCQAKVSSINDKSDWKWKRLKSLVIDFTED	280
DB	287	FYQILSNKPELLDMLLVNPNPYDYAFVSQGE-VSVASIDDSSEELMATDSAFDVLGFTSE	345
QY	281	EVEDLLSTVASVLHGNTHFAADE-DSNAQVTTENQLKVLTELLGVEGTTLREALTHRKI	339
DB	346	EVAGVKUTGALIMHYGNMKFKQKQREQAEPDGTEDAKSAYLMGNLSADLLKGLCHPRV	405
QY	340	IAKGSELLSPLNLEQAAYARDALAKAVYSRTFTVLVRKINRSKASKDAESPSWRSTTVIG	399

Db 406 KVGNEYVTKGQSVQVYVYSGALAKAVYKMFNMWVTRINATLETQKPRQ-----YFIG 459
QY 400 LLDYIGVEVFOHNSFEQFCINCYCNKQLQOLFIETLSEQBEYBAEGIANEPVOYFNKI 459
Db 460 VLDIAGEFIDFNSFEQFCINFTNEKLCQFPNHHMFVLEQBEYKKEGIEWTFIDFGMDLQ 519
QY 460 IC-DLVEBEKFGIISIDEECLRPEGEATDITLFEKLEDVTKVPHPHLTTHKLADQKTR--K 516
Db 520 ACIDLI-EKPMGINSILIEECMFP-KATDMTFKALYD-----NHLGKSNQKPNVIK 571
QY 517 SLDRGFRLLHYAGEVYTSVTFDKNNDLLFRNLKMTCMSSMNPIMAAQCFDKSELS-- 574
Db 572 GKQBAHFSLLHYAGTVDYNILGWLEKNKOPNETVVALYQKSUKLMATLFSVATADTG 631
QY 575 -----KKRP---ETVATQFKMSILQVLEILLRSKPAVIRCIKENDAKQGRFDEVL 623
Db 632 DSGKSGKGGKGGSFQVSAHLRENLMKMTNLTTHPHFVRCIIPNERKAPGMDNPLV 691
QY 624 RHQVKYLGMLNLRVRAGFAYRRKYBAFLQRYKSLCPETWPMWAGR---PQDGVAVLVR 680
Db 692 MHQLRCNGVLEGIRICRKGFPNRLYGDQRQRYILNPVALP--EGQFIDSRKGTCKLS 749
QY 681 HLGKPEYKMGRTKIFIRPKTLFATEDSLVRROSLATKIQAAMRGFHWKQFLRV-- 738
Db 750 SLIDHNOYKFGHTKVFVK-AGLIGLLEEMRDERLSRIITRMOAQARGQLMRTEFKKIVE 808
QY 739 KRGAICIQSW 748
Db 809 RRDALLVIQW 818

RESULT 2

US-08-875-435B-4
; Sequence 4, Application US/08875435B
; Patent No. 6593304
; GENERAL INFORMATION:
; APPLICANT: Hasegawa, Kazuhide
; APPLICANT: Arakawa, Emi
; APPLICANT: Oda, Shoji
; APPLICANT: Matsuda, Yuzuru
; APPLICANT: Takahashi, Katsuhiko
; APPLICANT: Sugahara, Michihiro
; APPLICANT: Ishiyama, Haruo
; TITLE OF INVENTION: RECOMBINANT DNA COMPRISING DNA CODING
; TITLE OF INVENTION: FOR MYOSIN HEAVY CHAIN SM1 ISOFORM PROTEIN INSERTED INTO
; TITLE OF INVENTION: VECTOR DNA, MICROORGANISM CARRYING THE RECOMBINANT DNA, AND
; TITLE OF INVENTION: AN AGENT FOR TREATMENT OF ARTERIOSCLEROSIS COMPRISING THE
; TITLE OF INVENTION: RECOMBINANT DNA
; FILE REFERENCE: 07898-013001
; CURRENT APPLICATION NUMBER: US/08/875,435B
; CURRENT FILING DATE: 1997-07-25
; PRIOR APPLICATION NUMBER: PCT/JP96/00134
; PRIOR FILING DATE: 1996-01-25
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1972
; TYPE: PRT
; ORGANISM: Oryctolagus cuniculus
US-08-875-435B-4

Query Match 22.0%; Score 1190; DB 4; Length 1972;
Best Local Similarity 29.6%; Pred. No. 1-2e-103;
Matches 317; Conservative 196; Mismatches 357; Indels 200; Gaps 30;

QY 40 SEAAFTENLRPRRENLIYIIGPVLVSVPYDLOIYSQRMERYGVSVFVPPHFLFA 99
Db 97 NEASVLNLRERYFSGLIYISGLFCVWVNPYKQPLIYSEKIVDMYKKGKHEMPHIVA 156
QY 100 VADTVRALTRERDQAVMISGESGAGKTEATKRLQFYAETCPAPERG-----GAVR 152
Db 157 IADTVRMLQDREDQSILCTGESGAGKTENTKKVIQYLA-VVASHHKGGKDTSTIGE 215

QY 153 DRLLQSNPVLAEFGNAKTIARNDNSSRFKYMVQDFKGPAPVGGHILSYLLEKSRVVHQN 212
Db 216 KQLLOANPILEAFGNKTVKNDNSSFGRKIRINFDTVTGYIVGANIETYLLEKSRALROA 275
QY 213 HGERNFHVPQLLEGGBEETLRLGLERNPQSYLYLVKGQCAKVSSINDKSDKVMKAL 272
Db 276 REERTTHIFYLLAGAKERKWNDDLLE-GENNYTFLSNG-FVPIPAQADDEMFEQVEAM 333
QY 273 SVTDFTDEVEDLLSIVASVLHGNTHFAEDBSN-AQVTTENQLKYLTRLGLGVEGFTL- 330
Db 334 SIMGFSEEEGLSVLVKVVSVLQNLGNVFKKERTDQASMPDNTAAQKVCHLMGINVTDET 393
QY 331 REALTHKIIAKEGEELLSPNL-EQAAAYARDALAKAVYSRTFTWLVRKINRSIASKDAES 389
Db 394 RSLTTPR--IKVGRDVVQKAQTKEQADFVAALAKATYERLFEWILSRVYNKALDKTHROG 451
QY 390 PSWRSTTVLGLDIYGFVEFQHNSPQFCINYNKQLQOLFELTLEKSKQEEYEAEGIAW 449
Db 452 ASF-----LGILDIAGFEIFEVNSFQLCINTYNEKQLQLFNHTMFIQEYEQREGIEW 506
QY 450 EPVQYNNKIIC-DLVEEKFK-GIISILDECLRPEGEATDITLFEKLEDVTKVPHPHLT 506
Db 507 NFIDFGLDLQPCIELTERPNPNPGVALLDEECWFP-KATDKSFEKLCTEQGNHFKF-- 563
QY 507 HKLADQKTRKSLDRGEFRLHLYAGEVYTSVTFDKNNDLLFRNLKMTCMSSMNPIMAAQ 566
Db 564 -----QKPKLKDKTETFSIIHYAGVDYNASAWLTKQMDPLNDNVTSILNASDKFVADL 618
QY 567 F-----DKSELSDKKRP-----ETVATQFKMSILQILVEILRSKEPAYIRC 606
Db 619 WKDVDRIVLGDQMAKMTESLPSASKTKKGMFTVQGLYKEQGLKMLTILNTTFFVRC 678
QY 607 IKPNDAKQGRDEVLIRHQVKYLGMLNLRVRAGFAYRRKYBAFLQRYKSLCPETWPM 666
Db 679 IIPNEKRSKGLDAFLVLEQLRCNGVLEGIRICRQGFNRIVFOEPRQRYEILANAIDK 738
QY 667 MAGRPQDGVAVLVRHLYGKPEYKMGRTKIFIRPKTLFATEDSLVRROSLATKIQAAM 726
Db 739 GEMDGKQACILMIKALELDPNLYRIGQSKIFPR-TGVLAHLEBERDLKTDVIMAFQAMC 797
QY 727 RGFHWRQKFLRVKRSALCIQ-----SWWR----- 750
Db 798 RGYLARKAKAKQOQLTAMKVLRNCAAVLKRNMQWMLFTKVKPELLOVTRQEEEMOAK 857
QY 751 -GTLGRKKAARKAAQTIRRIIRGFIIRHSRCPENAFDLHVRASFLNLRRLRQPRNV 809
Db 858 EDELQKIKERQOK-ABSELQELQQ-----KHTQLSEE-----KNL 891
QY 810 LDTSWPTPPALREASELLRELCKMNMVWKYCRSISPENKQOLQOKAVASEIFKGGKDNV 869
Db 892 LQEQLOAETELYAEABEMRVLAAK-----KQEELE--ILHE----- 926
QY 870 PQSVPRLFISTRLGTEISPRVLQSLGSEPIQYAVVVKYDRKGYKPRPQLLTPSAVV 929
Db 927 -----MEARLEBEDRGQQLQA-----ERK--KMAQOQLDLEEQ---- 958
QY 930 IVEDAKVKQRIIDYANLTG-ISVSSLSLSLFLVHVRQEDNKQKGDVVLQSDHVIETLTKA 988
Db 959 LEEEAARQKLOLRKVTAETAKIKLEDDILVMDQ--NNKLKSKERKLEERISDLTTLIA 1016
QY 989 LSADRVNNINQGSITFAGGPRGDIIDFTSGSELLITKAKNGHLAVVA 1038
Db 1017 EEEKAKN-----LTKLKNKSHSMIS 1037

RESULT 3

US-08-875-435B-3
; Sequence 3, Application US/08875435B
; Patent No. 6593304
; GENERAL INFORMATION:
; APPLICANT: Hasegawa, Kazuhide
; APPLICANT: Arakawa, Emi
; APPLICANT: Oda, Shoji


```
QY 50 RRFRNLIYTYIGPVLVSNPYRDLQIYSRQHMERYGVGFYVPPHLEAVADTVYRALR 109
Db 107 DRYGSMWIIYSGFVTVNAPYKWLPTVEVAAAYGKRSEAPPHIFISISONAYOYML 166
QY 110 TERDQAVMTSGESGAGKTEATKLLQFYAETCPAPERG-----GAVDRLLQSNPV 161
Db 167 TDRENQSILITGESGAGKTVNTKRVIOYFAVIAIGDRSKKQDQSGKGTLEDQIIQANPA 226
QY 162 LEAFNAGNKTLRNDSSRFKYMVDQDFKGPVGGHLSVYLLEKSRVHVHQNHGHERHVF 221
Db 227 LEAFNAGNKTVRNDSSRFKGFIXIHFGATXKLASADLETYLLEKSRVIFQJKAERDHYIF 286
QY 222 YQLEGGEBEETLRRLGLERNPQSYLYLVKGCACVSSINDSKWVMRKALSVDFDETE 281
Db 287 YQILSNKKPELLDMLLTNNPYDYAFISQGB-TTVASIDABELMATDNADFVLGFTSEE 345
QY 282 VEDLLSIVASVLHGNHFADE-DSNAQVTNQLKYLTRLGVGEGTTLREALTHRKII 340
Db 346 KNSMYKLTGAIMHFGNMKPKLKQREQAEPDGTEDADKSAYLMLNSADLLKGLCHPXVK 405
QY 341 AKGEBLLSPNLQAAVARDALAKAVYSRTFVLVRKINRSKASKDAESPSWSTTVLGL 400
Db 406 VGNBYVTGQNVQOVIYATGALAKAVYERFMNWMVTRINATLETQP-----XQYFIGV 459
QY 401 LDYGFVFOHNSFEQFCINYNCKEKLQQLFIELTLKSEQEYEAEGIAWEPVQYFNKKII 460
Db 460 LDIAGFEIPEFNSFEQLCINFTEKLOQFFNHMFVLEQBEYKKEGIEWTFIDXGMDLQA 519
QY 461 C-DLVEEKFGIISILDEECLRGEGATDITFLEKLEDTVKPHPHLTHKLADQKTR--KS 517
Db 520 CIDLI-EKPMGIMSILEECMFP-KATDMTFKAKLFD-----NHLGKSANFQKPRNKG 571
QY 518 LDRGEFRLHYAGEVTVSYVTGELDKNDLLFRNLKETMCSMMNPIMAOCE-----567
Db 572 KPEAFSLHYAXIVYNIIGWLQKNDPLXETVXGLYQKSLXLLSTUFANYAGADAPI 631
QY 568 DKSELSDXKRP--ETVATQFMSLLQQLVEILRSKEPAYIRCIPNDAKQGRFDEVLIRH 625
Db 632 EKGKGAKKXGSSFTQSALHRENKLMTNLRSTHPIHFVRCIIPNETKFGVMDNPLVWH 691
QY 626 QVKYLGMLNLRVRAGFAYRKYEAFLQRYKSLCBETWPMWAGRPQDG---VAVLVRHL 682
Db 692 QLRNCNVEGIRICRGFFNRILYDFXQRYXILNPA--IXEGQFXDGRKXKAEKLLSSL 749
QY 683 GYKPEYKMGRTKIFIRFPKTLFATEDSLFVRQS-LATKIQAAWGFHWROKFLV--K 739
Db 750 DIDHNOYKFGHYKVF--FKAGLLGLLEEMRXERLSRIITRIQAQSRGVILXRMYYKLLER 807
QY 740 RSAICITQSW 748
Db 808 RDSLLVIQW 816

RESULT 6
US-09-172-422-1
; Sequence 1, Application US/09172422A
; Patent No: 6300485
; GENERAL INFORMATION:
; APPLICANT: Adams, Arwen E.
; APPLICANT: Chiu, Choi Ying
; APPLICANT: Duhl, David
; APPLICANT: Gorman, Susan W.
; APPLICANT: Leng, Song
; APPLICANT: Sheffield, Val
; APPLICANT: Welch, Juliet
; TITLE OF INVENTION: MYOSIN IXA AND CYCLIC NUCLEOTIDE GATED
; CHANNEL-15 (CNGC-15) POLYNUCLEOTIDES, POLYPEPTIDES,
; FILE OF INVENTION: COMPOSITIONS, METHODS, AND USES THEREOF
; FILE REFERENCE: 200130.442
; CURRENT APPLICATION NUMBER: US/09/172,422A
; CURRENT FILING DATE: 1998-10-14
; NUMBER OF SEQ ID NOS: 3
```

; SOFTWARE: Fast-SEQ for Windows Version 3.0

; SEQ ID NO 1

; LENGTH: 2548

; TYPE: PRN

; ORGANISM: Homo sapien

US-09-172-422-1

Query Match 20.5%; Score 1105; DB 4; Length 2548;

Best Local Similarity 25.2%; Pred. No. 2.6e-95;

Matches 320; Conservative 205; Mismatches 370; Indels 376; Gaps 32;

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QY 40 SEAAFTENLRRRRENLIYTYIGPVLVSNPYRDLQIYSRQHMERYGVGFYVPPHLEA 99
Db 158 NEXTLLENLRDRFKHKIITYVGSILIVINPFPLIYNPKYVMKYVDNHLGKPEPHIYA 217
QY 100 VADTVYRALRTERDRDQAVMISGESGAGKTEATKLLQFYAETCPAPERGA--VRRL 157
Db 218 VADVAYHAMLQKKNQCIIVISGESGSGKTQSTNFLIH---HLTALSKQGFASGVEOILG 274
QY 158 SNPVLFAFNAGNKTLRNDSSRFKYMVDQDFKGPVGGHLSVYLLEKSRVHVHQNHERN 217
Db 275 AGFVLEAFNAGNKTARHNNSRFKGFQVNYQETGTVLGAYVEKYLEKSLRVYQEHNERN 334
QY 218 FHVYVYOLLEGGEBEETLRRLGLERNPQSYLYL-----VKGCQAKVSSI 259
Db 335 YHVYVYLLAGASEDESAFHL-KQPEEYHYNQITKKPLRQSMDDYCYDSEPDCTVEGE 393
QY 260 NDKSKVMKALKSVIDFTEDEVEDLSIVASVLHGNHFAAD--EDSNAQVVTENQLK 317
Db 394 DLRHDFERLQALAMVGLPKTRQIFSLLSAILHGNICYKKTVRDSDSIDICNEVLP 453
QY 318 YLTRLLGVGEGTTLREALTHRKIIAKGEBLLSPNLEQAAVARDALAKAVYSRTFTLVLRK 377
Db 454 IVSEILLEVEKEEMLFALVTRKTVTVEKILPYKLAEAIVTVRNSMAKSLYSALFDWIVER 513
QY 378 INRSILA-SKDAASPGWRSTTVLGLLDIYGFVFOHNSFEQFCINYNCKEKLQQLFIELTLK 436
Db 514 INHALLNSKDLSEHT--KTLSIGVLDIFGFDEYENNSFEQFCINFANERLQHYFNHPIK 571
QY 437 SQOEYEAEGIAWEPVQYFNKKIICDLVEEKFGIISILDEECLRGEGATDITFLEKLED 496
Db 572 LEQBEYRTGEGISWHNIDYDNTCCINLISKKTGTLHLLDEESNFP-QATNQTLLDKFK- 629
QY 497 TVKPHPHLTHKLADQKTEK--SLDRGEFRLHYAGEVTVSYVTGFLDKND-----LL 547
Db 630 -----HQHEDNSYIEFPVAVMEPAFIIKHAGKVKYGVKDFREKNTDMRPDIVAL 679
QY 548 FRNLKETMCSMM-----559
Db 680 LESSKNAPISGMIGIDPVAVFWALLRAFFRAMVAFRAGKRNHHRKTHGDDTAPCALIK 739
QY 560 -----NP-----IMAC-----FD--568
Db 740 SMDSPFLQHPVHQRSLEILQRCKEEKYSITKKNPRTPLSLDQGMNALNEKNQHDTEFIA 799
QY 569 -----KSELSD-----574
Db 800 WNGRTGIRQSRLLSGTSLDKDGIFANSTSSKLLERAHGILTRKNKNFKSPALPKHLLV 859
QY 575 -----KRPETVATQFMSLLQQLVEILRSKEPAYIRCIPND 610
Db 860 NSLKHILTRLTQDRITKSLHLHKKKPPSISAPQASLSKLMETLGOAEPYFVFKCIREN 919
QY 611 DAKOPGRFDEVILRHQVKYLGMLNLRVRAGFAYRKYEAFLQRYKSLCBETWPMWAGR 670
Db 920 AEKLPREFSDVILRQLRYTGMLETVQIRQSGYSSKYSFQDFVSHFVHLLPRNIIPSXFN 979
QY 671 PDGVAVLVRHLGYKPEYKMGRTKIFI-----RFPKTLFA 706
Db 980 IOD-----FFRKINLNPQNYQVQKTMVFLKBOERQHLQDLHQLVLRILLQRPVRLLC 1035
QY 707 TEDSLEVRQRSL-----ATKIQAAWGFHWROKFL 736
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; PRIOR APPLICATION NUMBER: US 60/211,572
; PRIOR FILING DATE: 2000-06-15
; PRIOR APPLICATION NUMBER: US 60/216,382
; PRIOR FILING DATE: 2000-07-07
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1236
; TYPE: PRT
; ORGANISM: homo sapiens
; US-09-883-134--4

Query Match          20.0%; Score 1078.5; DB 4; Length 1236;
Best Local Similarity 33.0%; Pred.No.2.5e-93;
Matches 260; Conservative 161; Mismatches 284; Indels 83; Gaps 17;

QY      31  DFVLLNFTSEAAFIENLRFRERENLIYTGIVLVSNUNPYRDLQIYSROHMERVGYSF 90
Db      335  DLVNLE-VLDEDTIIHQKRYADLLIYVVGDIILALNPFQNLISYSPQFSRLYHGYKR 393

QY      91  YEVPPLHAVADTYRALTERRRQQAVMISGESGAGKTEATKRLQFYAETCPAPERGGA 150
Db      394  ASNPPIHAFASADAAAYQCWVLTSKQDCIVISGESGSGKTESAHLIVQHL--TFLKANQQT 451

QY      151  VRDRLQSNPVLRAFGNAKTLRNDNSRFGKIMDVQDFKGPAGYGGHILSYLLEKSRVYH 210
Db      452  LREKILQVNSLVEAFGNSCTAINDNSRFGKYLEMMFTPTGVVMGARISEVLEKSRVIK 511

QY      211  ONHGERNFHVFYQLLEG-GEETLRRIGL-ERNPQSYLYLVKGQCAKVSSINDXDMKVM 268

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RESULT 9
US-09-866-108A-15753

Db 424 LILSLVNRALKS-----SOHSLCSMMIVDTFQFQNPWEGSGARGASFEELCHNTAQDRL 477
QY 427 QQLFIETLTKSEOEYEAGIA-----WEPVOYFN-----NKIICDLVE-EKEKGIIS 473
Db 478 QRLFHRTLOELERKEDNIELAFDDLEFVADDSVAAVDQASHLVRSLAHAEARGLLM 537
QY 474 ILDEECLRGEDTDLTFLEKLEDTVKPHPHLTHKLADQTRKSLDRG-----EFLRLHYA 529
Db 538 LLEEEALVPG-ATEDALLDRLFSYGPQE-----GDKKGQSPLLRSSKPRHLLGHSH 589
QY 530 GE-VNYSTVTGELD--KNNDLLFRNLKETMCSMPIMAOCF----- 567
Db 590 GTNWEYVAGLVNLYTKQNPAT-QNAPRLQDSQKRIISNLLFGRAGSATVLSSGIAGLE 648
QY 568 DKSELSDDK-----RPETVATQFMSLLQLVLILSKSEPAYIRCIKPND 612
Db 649 GGSQALRRATSMRKTFITTTGMAAVKKSLCICIKLQVDALIDTIKRSKMHFCHFLPVAE 708
QY 613 KQPG-----RFEVLIRHQVKYGLGIMENLVRRAFG 643
Db 709 GWPGEPRSSRRVSSSELDLPPGDPCEAGLLQLDVSLLRAQLRGSRLLDAMRVYQY 768
QY 644 AYRRKYEAFLQYKSLCPETWPMAGR-----PQDGVAVLVRHLGYKEPEEYKMGRTXIF 697
Db 769 PDMVFPSEPRFVDVLAHLTKK-HGRNVIYVDEKRAVEELLESLDLEKSSCCLGLSRVF 827
QY 698 IRFPKTLFATEDSLEVRROSLATKIQAAMRGFWKQFLVRKRSAL-----CIGS----- 747
Db 828 FR-AGTLARLEQRDEQTSHTLTQAAACGEGYLAHQHFKKRIQDLAIRCVQNKKNKG 886
QY 748 -----WWR 750
Db 887 VKDWPWMK 894

RESULT 10

US-09-866-108A-15754
; Sequence 15754, Application US/09866108A
; Patent No. 6686188
; GENERAL INFORMATION:
; APPLICANT: GU, Yizhong
; APPLICANT: JI, Yonggang
; APPLICANT: PENN, Sharon G.
; APPLICANT: HANZEL, David K.
; APPLICANT: RANK, David R.
; APPLICANT: CHEN, Wensheng
; APPLICANT: SHANNON, Mark
; TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
; FILE REFERENCE: AEOICA-7
; CURRENT APPLICATION NUMBER: US/09/866,108A
; CURRENT FILING DATE: 2001-05-25
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; Remaining Prior Application data removed - See File Wrapper or PALM.

; NUMBER OF SEQ ID NOS: 15755
; SOFTWARE: Aecomica Sequence Listing Engine
; Patent No. 6686188
; SEQ ID NO 15754
; LENGTH: 1561
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-866-108A-15754

Query Match 9.6%; Score 519.5; DB 4; Length 1561;
Best Local Similarity 23.5%; Pred. No. 1.1e-39;
Matches 190; Conservative 130; Mismatches 319; Indels 171; Gaps 22;

QY 82 MERVGVFYEVPHPHFAVADTVVTRALTRERRDOQAVMISGESGAGCKEATKRLLOFYAET 141
Db 1 MHMFKGCRRDWAHIYAVAQATAYRAMLSRQDQASILLGSSGSKTSCQHLVOYLATI 60
QY 142 CPAPERGAVDRLQLSNFVLEAFGNAKTLNDNSSRFGKYMVDVQFPGKAPVGHILSY 201
Db 61 AGISGNKVFSEKWOALYTLLEAFGNSPTIINGNATRFSQLSLDFDQAGQVASASICTM 120
QY 202 LLEKSRVVHQHNGERNPHVFYQLLEGGEBEETLRILGLERNPQSYLYLVKGCACVSSIND 261
Db 121 LLEKLRVARRPASEATFNVFYLLACGGDTLRTTELHNLHNAENNVFVPLAKPEEKQA 180
QY 262 KSDMKWKRKALSVIDFTEDEVEDLLSIVASVLHLG--NIHFAADESDSNAQVTTENOLKYL 319
Db 181 AQQSKLQAAMKVLGISPDQKACWFLAAYIHLGAAGATKEAAEAGKQFARHEWAQA 240
QY 320 TRLLGVGETTIREALTHRKIIAKGEELLSPNLBQ-----AAYARDALA 363
Db 241 AYLLGCSLEELSSAIFKHQ--HKGDTLQRSTSFQPEESGLGDTGPKLSALECLEGMA 298
QY 364 KAVYSRTFTLVLRKINRSLSKDAESPSRSTTVLGLLDIYGFVFOHN-----SFEQF 417
Db 239 AGLYSELFLLVSLVNRALKS-----SOHSLCSMMIVDTFQFQNPWEGSGARGASFEEL 352
QY 418 CINYNEKLOQLFIETLTKSEOEYEAGIA-----WEPV-----QFNNKIIIDL 463
Db 353 CHNYTQDRLQRLFHRTFVQELRYKEBNIELAFDLEPPTDSDVAAVDQASHQSLVRS 412
QY 464 VE-EKFGIILDEECLRGEDTDLTFLEKLE-----TVKPHPHL 505
Db 413 ARTDEARGLLWLEEEALVPGASED-TLLERLFSYGPQEGDKKGQSPLLHSSKPHHLL 471
QY 506 THKLADQKTRKSLDRGEPFLHLYAGEVTVSYVTGFLD--KNNDLLFRNLKETMCSMPIM 563
Db 472 GHS-----HGTNWEYVAGLVNLYTKQNPAT-QNAPRLQDSQKII 512
QY 564 AQCF-----DKSELSDDK-----RPETVATQFMSLL 590
Db 513 SNLFLGRAGSATVLSSGIAGLEGGSQLALRRATSMRKTFITTTGMAVAVKKSLCICIQMLQVD 572
QY 591 OLVEILRSKEPAYIRCIKP-----NDAKQPG--RPEDEV 621
Db 573 ALIDTIKKKHLHFVHCFLPVAEGWAGPRSSRRVSSSELDLPSGDHCEAGLLQLDVP 632
QY 622 LIRHQVKYGLIMENLVRRAGFAYRRKYEAFLQYKSLCPETWPMAGR-----PDGV 675
Db 633 LLRTQLRGSRLLDAMRVYRQGYPDHMFSEPRRFDVLAHLTKK-HGRNVIYVDERAV 691
QY 676 AVLVRHLGYKPEEYKMGRTKIFIRFPKTLFATEDSLEVRROSLATKIQAAMRGFWKQF 735
Db 692 EELLECLDLEKSSCCMGLSRVFR-AGTLARLEQRDEQTSHTLTQAAACGEGYLAHQH 750
QY 736 LRVKRSAL--CIGS-----WWR 750
Db 751 KKRKIQDLAIRCVQNKKNKGKVDWPMWK 780

RESULT 11

US-09-866-108A-3
; Sequence 3, Application US/09866108A


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QY 137 FYAETCPAPERGGAVR--DRLLOS-----NPVLEAFGNKATLRN---DNSS--- 177
Db 382 FDAPEAPLPSRKALETVDRLTESLDTDYASRIIHPVIRTLDSPELRSTAMDTLSSLV 441
QY 178 -RFGKYMDVQDFKGA PVGGHLSYLLKSRVHVQH- GERNHFVY 222
Db 442 FOLGKKYQIFP-----MVNKLVRHRIHQRYDVLCIRVKGTYLADEEDPLIY 492
QY 223 Q--LLEGGEBETLRLGLERNPQSYLYLVKQCAKUSSINDKSDWKVMKALSVIDFTED 280
Db 493 QHRMLRSQGDALASGVETGPMKKLH-----VSTINLQKAWGAARR----- 534
QY 281 EVEDLLSIVASVLHLGNIHFADEDSNAQVTENQLKYLTRLGLGVEGTTIREALTRHKII 340
Db 535 -----VSKDDWLEWLRRL----- 547
QY 341 AKGBELLSPNLQEAAYARDALAKAVYSRTFTWLVRKINRSLASKDAESPSWSTTVLG- 399
Db 548 --SLELL-----KSSSPSLRSCWALAQ 568
QY 400 ----LLDIYGFVFOHNSFEQFCINCEKLOQLF---IELTLKSEOEYEAEGIAWEP 451
Db 569 AYNPMARDLF-----NAAFVSCWSELNEDQOQDELIRSIELALTSQD-----IA-EV 613
QY 452 VQYFNKKIICDLVEEKFGIISILDE-----ECLRPGEATDLTFLEKLEDTVKP 500
Db 614 TQTLLN--LAEPMEHSDKGPLPLRDNDGIVILGERAAKRAYAKA---LHYKELEFQKGP 668
QY 501 HPHEL-----THKLADQKTRKSLDRGEFRLHYAGVETYSVTGF----- 539
Db 669 TPAILESLSINNKL--QOPEAAAGVLEYAMKHF--GELEIQATWYKELHEWEDALVAYDK 725
QY 540 -LDKQNDLLFRNLKETMCSMNPIMA-----OCFDKSELSDKKRPETVATQFQMSL 589
Db 726 KMDTNKD-----DPELMGLGRMCLEALGEGWQLHQOCCERKWTLVN---DETQAKMARMAA 777
QY 590 LQVLEILRSKEPAYIRICIKNDKQKQRPDEVLIRHQ-----VKYLGIMENLRVR 639
Db 778 AAANGLGQWDSMEEYTCMIPRTHDGA FYRAVLALHQDLFSLAQOQCIDKARDLLDELTA 837
QY 640 RAGFAYRKYEAFLORYKSLCPETWPMWAGPQDGVAVLVRHLGYKPEE---YKMGRTKI 696
Db 838 MAGESYSRAYGAMVS-----C-----HMLSELEEVIOYKL----- 867
QY 697 FIRPKTLFATEDSLEVRROSLATKIQAAWRGFHWROKFLVRKRSALC-----IQSWRGT 752
Db 868 -----VPERREIIRQIWWERLQOQRIVEDQWQILVYRSLVSPHEDMRTW----- 913
QY 753 LGRKKAARKWAAQTIRRLTRGFI LRHSRPCPENA--FFLDHVRA SFILNLRRLPRNVLD 811
Db 914 -----LKYASLCGSGRLAHLAKTILVLLGVD---PSRQLD 946
QY 812 TSWPTPPALREASELLRLCMVMYWKYCRSISP-----EMKQOOLQOKAVASEIFK 863
Db 947 HPIPTVHPQVTYA-----YMKQM--WKSARKIDAFQHMQHVFQTMQOQOAHAIATEDQ 998
QY 864 GKNDYQSVPRLFI STRLGTEBISPRVLOSLGSEPI-----QYAVPVVKYDRGKYPKPR 919
Db 999 HKQELH--KL MARCFL--KLGEWQLN--LOGINESTIPKVLQYYSAA TEHRSRWYKAWHA 1052
QY 920 QLLLTSAVV-----IVEDAKYQOR--IDYANTIGISVSLSDSLFVLHVQREDNKQGD 972
Db 1053 WAYMNFPAVLHYKHONQARDEKKLRHASGANITNATTAATTAATTASTEGSSESE 1112
QY 973 VLQSD-----HVIEFTLTKT-----ALSADRNNI 997
Db 1113 AESTENSPSPLOKKVTEDL SKTLLMYTPVAVQGFRRSISUSRGNNL 1160
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RESULT 14

US-09-012-504A-12

; Sequence 12, Application US/09012504A

; Patent No. 6464974

```
; GENERAL INFORMATION:
; APPLICANT: Berlin, V.
; APPLICANT: Chiu, I.
; APPLICANT: Cottarel, G.
; APPLICANT: Damagnez, V.
; TITLE OF INVENTION: IMMUNOSUPPRESSANT TARGET PROTEINS
; FILE REFERENCE: APBI-P05-036
; CURRENT APPLICATION NUMBER: US/09/012,504A
; CURRENT FILING DATE: 1998-01-23
; PRIOR APPLICATION NUMBER: 08/360,144
; PRIOR FILING DATE: 1994-12-20
; PRIOR APPLICATION NUMBER: 08/250,795
; PRIOR FILING DATE: 1994-05-27
; NUMBER OF SEQ ID NOS: 35
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 12
; LENGTH: 1809
; TYPE: PRT
; ORGANISM: Mammalian
; US-09-012-504A-12
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```
Query Match 3.0%; Score 160; DB 4; Length 1809;
Best Local Similarity 19.1%; Pred. No. 3.2e-05;
Matches 193; Conservative 121; Mismatches 318; Indels 376; Gaps 46;
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QY 137 FYAETCPAPERGGAVR--DRLLOS-----NPVLEAFGNKATLRN---DNSS--- 177
Db 382 FDAPEAPLPSRKALETVDRLTESLDTDYASRIIHPVIRTLDSPELRSTAMDTLSSLV 441
QY 178 -RFGKYMDVQDFKGA PVGGHLSYLLKSRVHVQH- GERNHFVY 222
Db 442 FOLGKKYQIFP-----MVNKLVRHRIHQRYDVLCIRVKGTYLADEEDPLIY 492
QY 223 Q--LLEGGEBETLRLGLERNPQSYLYLVKQCAKUSSINDKSDWKVMKALSVIDFTED 280
Db 493 QHRMLRSQGDALASGVETGPMKKLH-----VSTINLQKAWGAARR----- 534
QY 281 EVEDLLSIVASVLHLGNIHFADEDSNAQVTENQLKYLTRLGLGVEGTTIREALTRHKII 340
Db 535 -----VSKDDWLEWLRRL----- 547
QY 341 AKGBELLSPNLQEAAYARDALAKAVYSRTFTWLVRKINRSLASKDAESPSWSTTVLG- 399
Db 548 --SLELL-----KSSSPSLRSCWALAQ 568
QY 400 ----LLDIYGFVFOHNSFEQFCINCEKLOQLF---IELTLKSEOEYEAEGIAWEP 451
Db 569 AYNPMARDLF-----NAAFVSCWSELNEDQOQDELIRSIELALTSQD-----IA-EV 613
QY 452 VQYFNKKIICDLVEEKFGIISILDE-----ECLRPGEATDLTFLEKLEDTVKP 500
Db 614 TQTLLN--LAEPMEHSDKGPLPLRDNDGIVILGERAAKRAYAKA---LHYKELEFQKGP 668
QY 501 HPHEL-----THKLADQKTRKSLDRGEFRLHYAGVETYSVTGF----- 539
Db 669 TPAILESLSINNKL--QOPEAAAGVLEYAMKHF--GELEIQATWYKELHEWEDALVAYDK 725
QY 540 -LDKQNDLLFRNLKETMCSMNPIMA-----OCFDKSELSDKKRPETVATQFQMSL 589
Db 726 KMDTNKD-----DPELMGLGRMCLEALGEGWQLHQOCCERKWTLVN---DETQAKMARMAA 777
QY 590 LQVLEILRSKEPAYIRICIKNDKQKQRPDEVLIRHQ-----VKYLGIMENLRVR 639
Db 778 AAANGLGQWDSMEEYTCMIPRTHDGA FYRAVLALHQDLFSLAQOQCIDKARDLLDELTA 837
QY 640 RAGFAYRKYEAFLORYKSLCPETWPMWAGPQDGVAVLVRHLGYKPEE---YKMGRTKI 696
Db 838 MAGESYSRAYGAMVS-----C-----HMLSELEEVIOYKL----- 867
QY 697 FIRPKTLFATEDSLEVRROSLATKIQAAWRGFHWROKFLVRKRSALC-----IQSWRGT 752
Db 868 -----VPERREIIRQIWWERLQOQRIVEDQWQILVYRSLVSPHEDMRTW----- 913
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Qy 753 LGRKAAKRWAAQTIRRLIRGFIIRHSPRCPEA-PFLDHVRASFLINLRQLPRNVLD 811
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Qy 812 TSWPTPPALREASELLRELCKMVMWKYCRSISP-----EWKQOLQKAVASEIFK 863
Db 947 HPLPTVHPQVTYA-----YMKM-WKSARKIDAFQHMQHVFQTMQOQAHAIAATEDQ 998
Qy 864 GKDNYPQSVPRLFISTRLGTEISPRVLSLSEPI-----QYAVPVVVKYDRKGYKPRR 919
Db 999 HKQELH-KLMARCF--KLGEWOLN---LQGINESTIPKVLYQYSAATEHRSRYKAWHA 1052
Qy 920 QLLTPSAVV-----IVEDAKVKOR-IDYANLTGISVSSLSLDFVLHVQREDNKOKGD 972
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RESULT 15

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US-09-012-399A-12
; Sequence 12, Application US/09012399A
; Patent No. 6509152
; GENERAL INFORMATION:
; APPLICANT: Berlin, Vivian
; APPLICANT: Chiu, Maria Isabel
; APPLICANT: Cottarel, Guillaume
; APPLICANT: Damagnez, Veronique
; TITLE OF INVENTION: IMMUNOSUPPRESSANT TARGET PROTEINS
; NUMBER OF SEQUENCES: 35
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/012.399A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/360,144
; FILING DATE: 20-DEC-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-036.02
; TELEPHONE: 617-832-1000
; TELEFAX: 617-832-7000
; INFORMATION FOR SEQ ID NO: 12:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1809 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-012-399A-12

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Query Match 3.0%; Score 160; DB 4; Length 1809;
Best Local Similarity 19.1%; Pred. No. 3.2e-05;
Matches 193; Conservative 121; Mismatches 318; Indels 376; Gaps 46;
Qy 137 FYAETCPAPERGGAVR--DRLLQS-----NPLVLEAFGNKTLRN---DNSS--- 177
Db 382 FDAEALPSPKAALETVDRLTESLDFDTDYASRIIHFIVRTLQDSPELRSTAMDTLSLV 441

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Db 493 QHRMLRSQGQDALASGPFVETGPMKKLH-----VSTINLQKAWGAARR----- 534
Qy 281 EVEDLLISIVASVLHLGNIHFAADEDSNAQVTTNQLKYLPRLLGVEGTTLREALTHRKII 340
Db 535 -----VSKDDWLEWLRLL----- 547
Qy 341 AKGEBLLSPNLQAAVARDALAKAVYSRTFTVLVRKINPESLASKDAESPSWSTTVLG- 399
Db 548 --SLELL-----KUSSPSLSLSCWALAQ 568
Qy 400 -----LLDIYGFVFOHNSFEQFCINYCNEKLOQLF---IELTLKSEQEYEAEAGIAWEP 451
Db 569 AYNPMARDLF-----NAAFVSCWSELNEDQDELIRSIELALTSDQ-----IA-EV 613
Qy 452 VOYFNKKIICDLVBEKPKGIISILDE-----ECLRPGEBATDLTLEKLEDIVKP 500
Db 614 TOTLLN--LAERMEHSDKGLPLRDLDDNGIVLLGERAAKCRAYAKA---LHYKSELEFQKGP 668
Qy 501 HPHFL-----THKLADQKTRKSLDRGEPRLLHVAGEVTVYVTFG----- 539
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Qy 540 -LDKNNDLIFRNLIKETWCSSMNPIMA-----QCFDKSELSDKRPETVATQFMSL 589
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Db 1053 WVMNFEAVLHYKHQNOARDEKKLKHASGANITNATTAATTAATTASTEGSSESE 1112
Qy 973 VVLQSD-----HVIETLTKT-----ALSADRVNNI 997
Db 1113 AESTENSPTPSPLQKKVTEDELSKTLMTYVPAVQGFPRFISLSRGNL 1160

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Search completed: March 30, 2004, 15:13:36
Job time : 41.4868 secs